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THE TIMES NEWSPAPERS LIMITED: 1985
Printed by The Times Newspapers Ltd, 1, The Quadrant, London W1A 0AA
Typeset by The Times Newspapers Ltd, 1, The Quadrant, London W1A 0AA
Printed by The Times Newspapers Ltd, 1, The Quadrant, London W1A 0AA
Published by The Times Newspapers Ltd, 1, The Quadrant, London W1A 0AA

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The on-off switch

The "switch" is neither definitely on nor definitely off. It is now several months since the University Grants Committee asked universities to consider both the feasibility and cost of providing additional places for science students. But still no firm decision has been taken to provide the extra resources to pay for these additional places. The Treasury apparently remains unconvinced. The lack of firm leadership at the top of the Department of Trade and Industry, in the enforced absence of Mr Norman Tebbit, may have been significant because the pressure from within Whitehall for the "switch" has come as much from the DTI as the Department of Education and Science. But the continuing economic uncertainty produced by the fall in the value of the pound and the damaging prolongation of the miners' strike must have made the past few months a particularly inauspicious time to argue for increased public expenditure.

The idea of the "switch" has not been killed off. Maybe when the political ordeal of the approaching Budget has been negotiated the prospect of more money for extra science places in universities will lighten. The pressure from the DTI, alarmed by yawning skill shortages in computing and electronics, will certainly be maintained. On the other hand the DES has already planned its line of retreat. It has sided back to the argument that by a wave of the Jarratt efficiency wand and further raids on the social sciences and humanities (and pure science?) the "switch" can be made practically self-financing, an argument which the UGC believed it had disposed of early last autumn. In his latest letter to the committee, Sir Keith Joseph warned of the need to find as much as possible of the money needed to pay for the "switch" from within existing resources.

So the uncertainty continues. The UGC is keeping its fingers crossed, although the delay has clearly damaged the chances of universities being able to respond quickly. Yet this delay is not all loss. The months of waiting have at least provided an opportunity for a critical examination of both the theory and the practice of the "switch", which a rushed programme based on instant decisions would not have allowed. Maybe we have been preserved from some expensive mistakes. If there are people in Government who remain sceptical about the value and effectiveness of the "switch", there may be a growing number of people in higher education who are having second and cooler

thoughts - and not all are humanists, nuclear physicists and polytechnic people who stand to lose.

They have two worries; first, will the "switch" work; and second, will the resources to pay for it be offered to higher education in a Mephistophelian bargain that universities and colleges might better refuse? The first of these worries is that most immediate and practical. The DES, and UGC, argument runs something like this. Britain needs more and better scientists, especially in computing and electronics: nothing very surprising about this assumption, although it remains entirely unproved and not all internal comparisons support it, nor very novel because every Government since 1945 has argued along similar lines.

But the real difficulty starts with the second half of the argument. This is that the best way to achieve this objective is to provide extra places in universities. Why only in universities? Because universities are regarded as offering higher quality products and because if as a result universities admit students who otherwise would have gone to polytechnics the latter will be able to recruit acceptably qualified students even if higher diploma students have to be reled to make up for any shortfall. So according to the DES/UGC scenario we will be able to enjoy the best of all possible worlds. Quality will be enhanced and quantity increased - a bargain at a mere £50m (well, £25m would do).

But of course other scenarios are possible. One is that the £50m will have been spent on recreating spare capacity that higher education has spent a painful ten years trying to eliminate. The other is that the DES believes and if there are too many Acom troubles that make sixth formers think twice about career choices, the only result will be less efficient staff: student ratios and higher unit costs. This will be the same whether the extra places are provided only in universities or spread across the system. A second is that the same students will be educated expensively in universities rather than cheaply in polytechnics, with no uncontestable gain in quality. A third is that crucial technician courses will be starved of good students to prop up an expanded degree entry.

None of these more pessimistic scenarios is certain. But all are at least as plausible as the maybe naively optimistic version relied on by the DES and UGC. Without denying for a moment that severe skill shortages do

exist in key areas of new technology or that it is the Government's responsibility to act quickly and effectively to remedy them, the "switch" as at present conceived still seems a one-dimensional and over simple approach. A more intelligent and imaginative approach would find room for the important contribution that continuing education and conversion courses could make, especially when the skill most in demand in the newest technology seems to be almost instant adaptability against a general background of scientific and entrepreneurial sophistication. It might also place greater weight on tailor-made initiatives like those proposed by Professor John Ashworth and Sir Henry Chilver in information technology. There remains a strong sense that the problem has not been thought through properly.

The second worry is more speculative but still worth registering. It is fairly clear that if extra money is eventually found for the "switch" it will be kept under tight Whitehall control - "Whitehall" because the DTI and maybe the Department of Employment are likely to be as powerful sponsors as the DES. There will be no rerun of the new blood initiative in which the UGC was allowed a fairly free hand. Rightly or wrongly new blood has been labelled a disappointment in terms of the Government's objectives. Of course it would still, probably, be an exaggeration to suggest that a "switch" directly funded by Whitehall would be the seed from which some future ominous Manpower Services Commission-style presence might be established in higher education.

On the other hand... The precedent in further education is there for all to see. Lord Young has become a favourite confidant of Sir Keith and it would be remarkable if their discussion never wandered into higher education. There are those in Government prepared to endorse crude Cerdian knot policies. There are those who doubt very much whether traditional institutions like the UGC, local authorities, the inspectors and of course the DES itself can ever really deliver, and an insipid Green Paper would seem to them damning proof. As for the "switch" they win both ways; if it fails the case for cruder intervention is fuelled and if it succeeds a precedent for future intervention is established. The game is certainly being played for high stakes; all the more reason why higher education's leaders should not lose their nerve - and later their heads.

The worst of both worlds

There must have been those in the National Advisory Body who feared that they would be opening a can of worms in trying to formulate a research policy for public sector higher education. With little or no extra money to finance the operation, any system was bound to upset more people than it pleased and unfavourable comparisons with the dual research system enjoyed by the universities were unavoidable. The NAB, to its credit, decided that this was not sufficient reason to dodge the question.

Perhaps, had no choice, once detailed comparisons of funding levels on either side of the binary line began to be attempted by the Department of Education and Science, the NAB could hardly accept the proposition that research cost nothing in the polytechnics when 30 per cent of university staff costs were attributed to it. Everyone knew that there was plenty of worthy research being done in the public sector, even if there was no proper inventory available to show its true extent or value.

The first attempt to find a new system founded on the reluctance of the institutions to allow money traditionally allocated for teaching to be held back to fund research: it was an understandable reaction at a time of financial difficulties, especially for those colleges which could not expect to be in the column of research

support when the time came. Too bad that the advanced further education pool had always been used to finance research as well as teaching, penalizing those institutions which were leaders in the field.

It was the unexpectedly large increase in the size of the pool, which allowed the question to be reopened and some progress to be made towards the NAB's commitment to implement its research policy. A fund of £2.5 million could be sold to the institutions as a dividend of new money and would represent a contribution to the promotion of research in the sector.

However, it was clear to the NAB secretariat and to the board that only a selective approach would be likely to produce worthwhile results and commend itself to ministers. After all, the fund could only be built up to the point where it was truly effective: if the Government continued to treat the Keith Joseph fund as a black box, the NAB's proposed allocation and deal a blow to the initiative before it had got off the ground.

The decision to go for a genuinely selective scheme was a brave one for the board, many of whose members had to have answered difficult questions from the public sector

creating an elite group of polytechnics and ignoring the colleges (save for one particularly unusual case, in the Camberne School of Mines). Yet it was the local authority voice on the NAB committee, not the institutions or the unions, which finally got gold teeth.

In opting for an allocation which offers something to every polytechnic and ensures a more respectable showing for the colleges, the committee has gone for the worst of both worlds. In one respect, the allocation would be even more selective than before since the gap between the "first eleven" polytechnics and the rest is widened considerably. They would receive twice as much money as the next favoured group of institutions, and more than three times as much as any others.

At the same time, the committee will be seen at the DES to have taken just the sort of easy political option some feared when the NAB was established. Allocations of £25,000 a year to some £15,000 a year to others, leaving if the intention is to generate research of real quality. Sir Keith will not want to get off on the wrong foot with the newly reconstituted NAB, especially after accepting practically all the advice offered in the body's initial term, but it will be no surprise if his instincts on the board's



Fifth Column

Almost immediately upon the publication of last week's Fifth Column, I received a letter from an old friend in Oxford whose comments are a fair I must give them in full:

Dear Patrick, I hardly know how to express my astonishment at the irresponsible nonsense with which you littered last page of today's THES. If you really have such disrespect for the world of learning you would be better to stay quiet than display your ignorance. I know that you are a graduate of some ancient university in Ireland which is a serious liability with excuses you much; but it does not excuse you from making disrespectful remarks about the ancient universities of England.

Your dislike of honorary degrees shows that you have never understood their purpose. They do not, as your laughable honorary fellowships, exist to thank some local bore for being helpful; they are a way of honouring a major intellect. The Church can only canonize saints. One after he or she is dead, a university uses an honorary degree to honour a major intellect before it can think of it, just after - his event.

The main point is that you have never understood the University of Oxford. That reflects the fact that you did not study there. I must be passing that it has always been the case how anyone who was not there can have reached so senior an academic position, even if only in a provincial polytechnic. It can only have been because you were once a professor at a university. It wasn't a very good one, just one of the new ones that had to get started, an urgency that I am glad to say has never been disguised. What you fail to understand is that study at Oxford or Cambridge is an experience from which no one ever recovers. So magical is it that life after graduation can only be a long trail of nostalgia to the grave. And that lifelong nostalgia is one of the strengths of public life in this country. It enables civil servants (and particularly the Foreign Office in particular) to share a common humanity and culture which is different from that of anyone else anywhere in the world.

I appreciate that Mrs Thatcher's failure to finance higher education properly must affect you in your polytechnic as well as in the universities but obviously it does not matter so much. You have survived on miserable and indeed laughable budgets so far and no doubt you will continue to do so. But we have a different role and it does require a lot of money. It's all very well for you to quote Lord Rutherford's only joke. You may not know that in the seventeenth century the king sent a troop of horse to Oxford because it was short of loyalty and books in Cambridge, because it was short of learning.

Admittedly there are some very odd people around nowadays. You, for example, I believe you were once a visiting professor in the University of Salford. It is not surprising that you do not know what a real university is like. You once had a good night. Be careful. As Logan Pearsall Smith remarked: "Villainous weeds grow in uncultivated minds". See you next month. Don't forget the claret.

Ever,
Jim
Patrick Nuttgren

The Times Higher Education Supplement

March 1, 1985 No 643 Price 60p

Polys to award degrees

A formula that allows polytechnics to award their own degrees under licence and stops short of granting them charters is likely to be the central recommendation in the forthcoming Lindop report on external validation.

The main thrust of the report was decided at a two-day meeting of the Lindop committee at an Oxfordshire hotel last weekend. It will be in the hands of Sir Keith Joseph, Secretary of State for Education, before Easter, within the 12 month deadline set by him, and is expected to be published in late May or June.

Under the formula polytechnics and colleges would be allowed to award their own degrees under licence from an accrediting body, a streamlined Council for National Academic Awards. Individual courses would no longer be subject to external validation. Instead whole institutions would be licensed to approve courses and award degrees.

However the committee is likely to stop short of recommending that polytechnics should be granted their own charters, which will disappoint the polytechnics like Portsmouth which have campaigned for total academic freedom. The award of charters would undermine local authority control of advanced further education and destabilize the delicate balance between central and local government enshrined in the National Advisory Body.

Already there are signs that the CNA is trimming to the new Lindop wind. It is now being argued within the council that its Mode B plan, which was unveiled in December and would devolve responsibility for validation to academic boards while reserving formal approval to the CNA, is not necessarily incompatible with an accreditation scheme.

One view is that there is nothing in the council's charter which prevents institutions being allowed to award their own degrees under licence. So only a change in the CNA's less intractable statutes would be needed. Another view is that under Mode B, institutions would in effect be awarding their own degrees because validation by their academic boards would amount to virtual approval. So even a change in statutes might not be necessary. However most polytechnics have rejected the interpretation of the planned change and it has not impressed the Lindop committee.

A lot will still depend on the tone of the Lindop report. The CNA is braced for a critical attack on its record, which is inevitable because Lindop will rehearse the arguments of its opponents which dominated the evidence the committee received. The Lindop committee was established a year ago by Sir Keith Joseph to investigate the continuing need for external validation in polytechnics and colleges. Although its terms of reference also include the validating universities and the Business and Technician Education Council, from the start its target was very much the CNA.

Arts, social sciences lose students in new NAB cuts

by John O'Leary

More than one in five places on polytechnic and college arts and social science courses will be lost within three years if recommendations before the National Advisory Body this week are accepted.

The cuts would cover languages, humanities, arts, drama, music, social studies and a range of professional subjects. It would be the second successive time that the subjects have borne the brunt of a national planning exercise, despite a reluctance by the NAB to follow the Government line of putting more resources into science and technology.

Guidelines for the next full NAB plan, to take effect in 1987/88, are based on an overall reduction of 5 per cent in first-year enrolments. The influential Chairman's Study Group has proposed an initial approach which would treat all regions equally and would maintain the existing balance between full-time and part-time courses.

However, it has identified a number of priority programmes all of which would be allowed to maintain student numbers at existing levels. These include all the primarily vocational areas and those, such as health subjects, agriculture, town planning and librarianship, which are the subject of special studies.

The report before yesterday's meeting of the NAB board warned that even an increase of 10 per cent in teacher training intake (now overdue for announcement by Sir Keith Joseph, Secretary for Education and Science) would result in "substantial" cuts in the remaining programmes. The implied reduction in intakes would exceed 2 per cent, it said.

A second paper, proposing stable intakes for 1986/7, comments bitterly on the effects of Sir Keith continuing to set teacher training numbers in advance. The Chairman's

Study Group had been concerned about "the extent to which, yet again, the apparent and, in its view, unjustified priority given to initial teacher training as against all other provision was prejudicing proper consideration on an equal basis of all programmes." It recalled the NAB's request to Sir Keith in 1982 not to preempt other planning in this way.

Anticipating a big rise in teacher training numbers, the paper proposed "reverse diversification" in former teacher training institutions, where possible switching back provision from diversified courses. It assumes that any increases will have to be balanced by cuts in other programmes and hopes that this will apply at institutional, as well as national level.

Projections of the number of school-leavers likely to pass A levels in mathematics, physics and chemistry, combined with early returns from the annual survey of enrolments in colleges and polytechnics have persuaded the group not to propose increased targets in science and technology in 1987/88. First-year numbers in engineering were 16 per cent below the target set by the NAB in the annual "snapshot" survey, with the shortfall in other technological subjects approaching 10 per cent and science almost 7 per cent down. The shortfalls may be exaggerated if part-time numbers are predominantly responsible, since enrolments may pick up later in the year.

● Sir Keith has referred back the NAB's advice on research for further consideration. He has made it clear that he prefers the NAB board's selective approach on distributing the £2.5 million fund to the advice he received from the committee. However, he has stopped short of rejecting the advice outright.

The next meeting of the NAB committee is not due until March 25, which would be too late for inclusion in the wider distribution of local authority funds, so an emergency meeting is likely to be called next week.



Sir Keith Rhys Jones, the actor and comedian, breakfasts at Paddington Station, served by students from Sir Henry's Episcopal Medical School. He joined hundreds of other hungry commuters who were approached by students as they got off their trains, invited to leave the rush-hour in mid flow and enjoy a leisurely meal. In return they could buy a rag and donate to this year's charity, which includes the Shaftesbury Society for handicapped children. The rag mag on sale at the station was apparently a censored version.

Controversy over Birkbeck appeal

by Peter Aspdin

Birkbeck College, London has had to spend nearly £3 for every pound raised by a £1 million appeal for funds, the college's court of electors committee has been told.

The shortfall has been caused by the payment of £145,000 to a professional fund-raising body, Robin Briers Associates, while the appeal has raised just £55,000 in three years, according to figures presented to the committee. The committee's chairman, Dr Angela Summerfield, told members that the college had actually raised more than £55,000, but the extra money would have been earned anyway, without the efforts of the appeal. But the chairman of the Friends of Birkbeck, continued on page 3

UGC may set up £50m special research fund

by Ngalo Crequer

£50 million may eventually be set aside by the University Grants Committee to be given out selectively for specific areas of research.

UGC members gave more support to a scheme whereby £10 million in the first year, building up to £50 million in five years, will be allocated to selected research.

This would be on top of an amount for a research "floor" which would go to all universities, though even here the UGC would not expect the money to go uniformly across all departments. A more controversial proposal, that all research money, around 30 per cent of recurrent grant, should be selectively distributed, seems to be losing ground.

The £10 to £50 million, though not the highest figure discussed by the committee, is still much more than the one per cent of research money favoured by vice chancellors, who want a "least change" policy.

An option being considered in tandem with the selective research policy is a radical switchround of student numbers among universities, giving some staff more time to do research. This inevitably raises again the spectre of the two-tier university system.

Mr Christopher Bell, chairman of the board of the National Advisory Body, urged that final decisions should not be taken until NAB/UGC talks on the apportioning of student numbers between the sectors had made headway.

The committee which also discussed next year's bid in the public expenditure survey, was very concerned about the continuing cuts in university funding.

There was a sharp disagreement when one member suggested they might have to close one university and another member said they would resign if this was proposed. UGC policy is currently against recommending closures.

There is still a wide range of views on how specific the UGC should or can be about telling universities what research to fund. Even if they go by universities' own academic plans they fear senators will not allow plans to be too detailed.

The UGC may simply say what it thinks by omission and advise which departments it regards as having recognized strengths.

Background, page 4



Grant levels upset OU

by Felicity Jones

The Open University's vice chancellor has warned that there will be fewer courses, fewer students and poorer tutorial provision despite the Government's changes to its future grant levels.

Dr John Horlock said he was disappointed that Sir Keith Joseph, Secretary of State for Education, had appeared to take so little account of the visiting committee report published following an announcement of the OU's £58.8 million grant level for this year and indicative levels of £58.7 million and £59.3 million in following years.

This year's grant has been increased by £100,000 with extra money being provided for two "new blood" information technology posts. The extra money is earmarked for a shift towards science.

A lump sum of £1.6 million has also been earmarked for staff compensation for voluntary redundancies and early retirement.

The Government-appointed visiting committee accepted generally that Sir Keith's original grant indications would have meant a £13.2 million cut and warned: "The possibility exists of real damage."

The Department of Education and Science has accepted some of the visiting committee's points over repayments in 1986. It has postponed repayment of the £2.4 million loan for professional industrial and commercial updating (PICKUP) programme course developments until 1988 and still may write it off as a grant.

Notice has also been taken of the visiting committee's recommendation that £1.2 million should be made available for new computing facilities, which will be provided in 1986.

Letters to the editor

Recruitment officers 'worse than car salesmen'

Sir - Your article concerning the lowering of entry standards of overseas fee paying students (*THESE*, February 15) quotes Mr Terry Smith of Hull University comparing the recruiting techniques of some UK universities with those often associated with second-hand car salesmen. It has been my experience in recent months that such salesmen are models of good practice when contrasted with the representatives of some UK universities and polytechnics. In visiting many different regions of the world, I have observed that UK universities and polytechnics have engaged in the following abuses that are detrimental to the welfare of international students and the good reputation of UK higher education:

- They use placement agencies (and agents of agents) that are extremely poorly informed about higher education in the UK and the particular institutions they are representing. Such agencies are often more interested in short-term financial gain than in the interests of an individual student, the long-term interests of an institution or a country's higher education system.
- They use placement agencies that charge institutions a *per capita* fee.
- They use placement agencies that charge both institutions and potential students a fee which they tell institutions that they are not charging students, and students that they are not charging institutions.
- They make "on-the-spot" offers of

places to candidates abroad. Often these potential students have only had the most cursory "interviews" and are asked to accept the offer made also "on-the-spot". Such practices are especially reprehensible as they tend to corner potential students who often do not know about the alternatives open to them and induce them to make a decision in pressured circumstances.

- They attempt to "poach" students from other institutions by making lower offers than those received by a student to date, and by deriding other UK institutions.
- They use placement agencies that, in attempting to secure students for UK institutions, make improper financial approaches to members of secondary school staffs.
- They do not make reasonable attempts to verify such matters as a student's financial standing or proficiency in English.

In a more general sense, the good reputation of UK higher education is being damaged by such practices as sending recruiters abroad on a "bring back expenses" basis, the conducting of "interviews" in hotel bedrooms, distributing recruitment literature in public transport, over-visiting schools, and participating in ill-prepared "missions" to various countries that resemble something between package tours and raids.

Exactly how widespread these practices are, I cannot say. However, even if they exist only at the level I have observed them or had them reported to me, this is an appalling situation. It has arisen largely because of a lack of knowledge of international promotion and recruitment among UK institutions following the UK government's 1980/81 decision on overseas student fees. US universities and colleges have been engaged in international promotion and recruitment since the 1950s. My own observations in the US and Canada suggest that a greater degree of sophistication exists among good universities and colleges in responding to the needs of the international students. Such institutions have well developed institutional policy on such matters as ratios of international students to domestic students, language ability, and on the provision of non-academic services specifically for international students. Most importantly, they have codes of ethics concerning international student recruitment that are often formulated in conjunction with national organizations. On the basis of my experience in North America and in the face of an immediate need in the UK, I would commend the following basic code of ethics for immediate adoption by UK universities, polytechnics and colleges:

- The paramount admissions decision should rest upon the needs, qualifications and aspirations of the prospective student and the educational opportunities afforded by the institution.
- Institutions should not make offers of places to prospective international students on a less selective basis than those made to prospective domestic students.
- Institutions should provide clear, unambiguous relevant information so that a prospective student unfamiliar with the institution and/or the UK higher education system can make informed academic, social and financial judgements.
- Institutions should not enter into relationships with placement agencies (thankfully, the most active UK agency has recently become bankrupt - however, it may be trying to re-emerge in a different form), except with the new British Council Education Counselling Service which has been developed in conjunction with the Committee of Directors of Polytechnics and over which universities and polytechnics have some detailed control albeit at present insufficient. This scheme differs markedly from the usual *per capita* commercial placement agency service and is more akin to a referral service with the British Council's counsellors acting in a manner not dissimilar to sixth-form careers staff.
- Institutions should not make "on-the-spot" offers or encourage students to complete application forms in the presence of their representatives or during the visit of such

representatives to a particular country so that they may carry forms back to the UK. All offers should be made either by The University Central Council Admissions, or the Polytechnic Central Admissions Scheme, or through the same channels via the British Council Educational Counselling Service in those countries where it is established.

At present the Secretary of State appoints two members of central institutions boards of governors, with the chairman elected by the board. But the Scottish Education Department has issued draft proposals for Napier and Glasgow that the Scottish Secretary should make three direct appointments, including the chairman.

The proposals, which this week were sent to the colleges' interim committees and Lothian and Strathclyde Regional Councils which currently run the college, have been attacked by both staff unions and councillors.

At a further education subcommittee meeting of Strathclyde Regional Council, Councillor Gerald McGrath accused the Scottish Secretary of trying

to pack the governing body with "tame seals". The number of trade union and regional council representatives are also reduced in the proposals, with an increase in employers' representatives. Mr Bob Kilpatrick, of the Scottish Further and Higher Education Association at Napier, said the proposals would mean businessmen being virtually in charge of the college.

Strathclyde councillors have criticized the imbalance between employer and employee representatives on the board, and are now seeking discussions with Mr Younger. Lothian region has still to debate the matter.

It is likely that the Government will seek a similar change in the regulations for the present central institutions. Mr Jack Dale, secretary of the Association of Lecturers in Scottish Central Institutions, said: "There is no evidence that the system of electing the chairperson has worked to the disadvantage of the central institutions or produced friction with the Scottish Office. We would not be happy with a move to increase Scottish Office control over allegedly independent bodies."

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'Tame seals' taunt on Scots colleges

by Olga Wojtas
Scottish Correspondent

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Sir Keith told of 'lost generation'

by Peter Aspdon

Universities have effectively lost a whole generation of the best graduates in the arts and social sciences, the Secretary of State for Education and Science, Sir Keith Joseph, has been told.

The claim came from the Standing Conference of the Arts and Social Sciences in Universities, a group formed in 1974 to protect their disciplines, when they met Sir Keith for the first time.

The conference spokesman, Dr Rod Lyall, dean of arts at Glasgow University, said the meeting was a "useful" one, although there were areas of disagreement with the Secretary of State.

"Our concern was to stress the extent of the damage done to the humanities and social sciences as a result of the cuts which have already

occurred and which we anticipate," he said after the meeting.

"If there is a further annual overall reduction, and both the University Grants Committee and individual universities hold back money to protect engineering and information technology, there will be an inevitable swing away from our resources. There is a real worry that many departments will not be sustainable in the future."

"The damaging consequences of current Government policy mean that there is an inability to recruit young staff - we have effectively lost a whole generation of our best graduates."

Dr Lyall said the group had asked Sir Keith for a replacement for the new blood scheme which, he said, was geared towards science subjects.

"The scheme emphasized innova-

tion and new areas, and didn't allow nearly enough for mainstream appointments in core areas, when what we needed was traditional specialists of the old kind," he said.

"We also made clear that we were keen on keeping our discretion on planning matters, and against any move towards centralized decision making."

Dr Lyall said Sir Keith was "attentive and sympathetic" towards the group's arguments, and reaffirmed his belief that the arts and social sciences were as important and difficult as other disciplines. "We told him that was not always manifest in Government policy," said Dr Lyall.

He added that representatives of the group hoped to meet Sir Keith again later this month.

Salary talks expected to break down

College lecturers have been warned by their union to expect an early breakdown in salary negotiations and to prepare for industrial action.

A new mood of pessimism has descended on the structure talks which both union leaders and the local authority employers hoped would lead to important reforms.

Senior officials of the National Association of Teachers in Further and Higher Education believe that remarks by Sir Keith Joseph directed at the extra funding needed for structural changes in schoolteachers' salaries will have equally severe effects on their own negotiations.

A joint review is in its early stages and both sides were committed towards trying to complete it by the end of this month. Talks are to continue despite fears that the money needed to finance the package may not be there.

But the degree of progress is likely to be subject to the funding issue. The employers, led by Mr John Pearman, were convinced that money would be available.

Mr David Tresman, Nafhe's negotiating secretary, said: "We were all of us bargaining in good faith. We were being told the money was there. This point was put to us in some optimism by people who had no reason to lie and jeopardize their reputations as negotiators."

The next stage is an approach to individual local authorities and consideration of sanctions involving a withdrawal of voluntary duties.

Leader, back page



Doing it the American way - Everton footballer Adrian Heath, out of action with a knee injury, is tested on a strength measurement system at Liverpool University's school of physical education. The system is commonly used on American footballers, but this is believed to be the first time it has been used on a professional footballer in Britain.

Radical switch in resources not on cards, warns Brooke

The Government has ruled out any radical change in the distribution of resources between the universities and the public sector, pending the awaited Green Paper.

Mr Peter Brooke, under secretary of state for education, told the Association of Colleges in Further and Higher Education in London last week that although the appropriate balance of resources between universities and public sector higher education was a vexed question, the Government saw no imperative for change.

"Each of the sectors and indeed within sectors individual institutions, have a distinctive role and as the objectives of the sectors are complementary but different, so are the total resource needs," Mr Brooke said.

He acknowledged that there was room for examining the balance of expenditure across higher education as a whole. Moreover the balance between institutional funding and student support would be looked at further in the context of the student support review.

Mr Brooke made it quite clear that further cuts were on the way because of the prospect of falling demand for higher education in the 1990s. He stressed that the Department of Education and Science projections for the maximum realistic increase in demand from mature students would be more than offset by reductions in the pool of young entrants. It was reasonable to suggest that no further increase in public sector student numbers was expected.

He added that further rationalization meant striking a balance between the stress of upheaval in the short term and the benefit of sensibly structured system in the medium long term. The National Advisory Body had already done much of the groundwork.

Mr Brooke said that the Government expected all institutions of further and higher education to find a balanced economic role.

RING THE CHANGE
The Department of Education and Science,
Elizabeth House, York Road, London SE1 7PH,
has a new telephone number, as from 4 March 1985:
DES
01-934 9000

Carr's history

Sir - There is little joy in could kale het up and I realize that your readers will, at this late stage, be little interested in my reaction to Peter Carr's *What is History?* published by you (but not passed on to me) last November. However one issue of general importance does arise: Clearly as Carr would expect with a scholar and teacher of Dr Brunsdon's distinction, there is much agreement between us over the basic principles and methods of historical study and over Carr's failure adequately to deal with these. Clearly, also, there is disagreement between us (as between myself and Carr) over "the appearance of meaning and direction in the development of the human past."

I perceive structures and interrelationships in the human past, but not meaning and direction. I respect Dr Brunsdon's conviction in this matter; but it is a question of conviction, not verifiable scientific truth. Indeed, I personally find Marxist arguments on the subject intellectually singularly unpersuasive.

Many historians perhaps a minority, believe as I do, while, of course, there are impressive numbers of gifted historians who share Dr Brunsdon's views. The point I wish to make is that it is desperately important that students of history be made aware of both approaches - the



E. H. Carr: weird fantasies

metahistorical approach which discerns direction and meaning, and the more pragmatic approach (which I perhaps need hardly repeat, is very different from the positivism caricatured by Carr) and given the opportunity to arrive at informed conclusions of their own. My criticism, not of Carr, but of his book, its title, and its manner of presentation to the public, was that it is a passionate statement of Carr's own convictions, not a balanced analysis of the methods and principles of historical study. *What is History?* is used simply as a starting point for a discussion of the topics Dr Brunsdon so effectively sets out in his letter, then I have no worries. But if it is

represented to students as an authoritative statement of what most practicing historians believe, then that is downright pernicious. I cannot help adding that, after a generation of brilliant studies of history from below - by Hobbes, Rude, P. Thompson, Ladurie, and others - there is a perverse quaintness in asking students to read Carr's weird 19th century fantasies about the role of great men in history.

No one for generations has believed in "a hard core of historical facts": the range runs from the incontrovertible - the exact date of Britain's declaration of war on Germany in 1914, for instance - to the increasingly complex - the class affiliation of Mr E. H. Carr, the standard of health of the British working class in the aftermath of the First World War, the existence of civic humanism or of the counter-reformation.

The point is that "historical facts" have to be teased out from the historical evidence: the discovery of new techniques, the development of new evidence, will establish new "facts" and de-throne old ones; in many of the most crucial areas uncertainty and disagreement among historians will remain.

ARTHUR MARWICK,
Visiting Scholar Hoover Institution
and Visiting Professor of History,
Stanford University.

Garfinkel

Sir - I have not yet seen Hedra's *Garfinkel and Ethnomethodology* and it may well be that Hedra is right in his review (*THESE*, January 25) in terms of Garfinkel's own views in 1945. But if this assessment is based on Garfinkel's 1965 terminence in the *Purdue Symposium* reprinted in Turner's *Ethnomethodology* (Penguin, 1974) then it may be that Hedra has been misled by a type in the first printing of the 1974 book whereby on page 15 the correct "1954" was rendered "1945". As Turner's index compiles and proofreads I might add that one, but every often it gets its own back.

Yours sincerely
DR PETER GJOLIN
Department of Sociology and Anthropology
Waterloo
Ontario, Canada

Poly dilemma

Sir - Eric Robinson has rightly described the dilemma of the polytechnics (*THESE*, February 15) caught between aspirations to national status and the demands of local accountability. It is a problem shared by many other colleges. However, in my view it is too late to realize his ideal of a locally-responsible higher education policy.

For one thing, Council for National Academic Awards degree courses recruit largely from the same narrow social groups as the universities. The diversity of educational opportunity at all levels that used to be offered in further education is greatly reduced and to be found not at polytechnics but at smaller colleges.

Secondly, the distribution of funds on the advice of the National Advisory Body has shown how small a part is now played by the local education authority. Unless local education authorities undertake significant local topping-up of National Advisory Body funds and pursue an active higher education policy in collaboration with their colleges, it is difficult to see what role they can have.

If, in addition, the Manpower Services Commission takes over the funding of non-advanced courses in colleges, nothing will remain of the local government element in further education.

Yours faithfully,
M. R. LANE, vice principal,
Mid-Kent College.

York defended

Sir - The University of York can well look after itself and will certainly survive the belittling and misleading comments of Nicholas Wapshot (*THESE*, February 15). As an outsider and a parent of a York graduate, my impression is that the teaching staff are unusually and often brilliantly productive in publishing and research, and they preserve scholarly standards while taking very seriously their teaching duties.

They are well ahead of most other

universities in at least six disciplines.

Disciplines. They have managed to achieve something like a real consensus despite all centrifugal tendencies. Students and teachers seem to share a view of world affairs with intelligent leftward tendencies with Marxism and realism. Religion and Marxism go well together. And for all this they are a standing reproach to most other British universities.

Yours faithfully,
R. A. DENNISTON,
Oxford University Press.

or doctrine awarded as a result of academic endeavour from the best qualifications obtained as honours degrees. Surely, it is possible to find some other way of honouring those who have made a particular contribution to higher education.

Yours sincerely,
DR C. A. RICHARDSON,
23 Colquhoun Drive,
Bearsden,
Glasgow

Oxford vote

Sir - The hostile reaction of the popular press to the decision of Oxford's dons not to award an honorary degree to the Prime Minister has been expected, but *THESE* comments (*THESE*, February 15) are, surely, not.

Of course Oxford University is cushioned by its endowment and other private resources from the effects of government policy; unlike Oxford dons teach less and have better conditions than other academics, as we in public sector higher education are better off than those in state schools. But I do not find "I'm right, Jack" an attractive attitude.

Government policies, which the Prime Minister is particularly identified, means reduction of funding in many areas of education, worsening of staff-student ratios, reduction of staff and reduction of research. Rates of vote was, surely, not merely about these problems in relation to Oxford, but an indication of the concern widespread throughout the education system, in universities, polytechnics, colleges, and all types of school, at the deleterious effects of Government policy on the quality of education in this country, and hence on the country's future.

DON'S
DIARY

MONDAY

January: Pondering the registrar general's designation of class for my contribution to the generally daffed fifth year culture and civilization lecture course now running for the last time in the fast approaching term, I wonder whether the nomadic group of English lectors employed in university departments around the world, and of which I am one, are to be classed with university dons or with teachers.

Certainly it's not the same as being a tenured lecturer in terms of the professional knowledge we seem to be accredited with here. Categories are not really internationally transferable either, especially as I think of my ex-head of department who was also vice dean of the faculty, giving private English lessons to his sons' fellow students in order to make ends meet. What price education.

TUESDAY

February: Into the beginning of term and I face a killer day. Three double seminars in the English department followed by a lecture for the first meeting of the English teachers' section of the recently formed modern philology society. Classes start quite well, especially translation where my system seems both to work and interest the students. Hope I got my volume of exercises published.

Arrive at what I think is ten minutes late for my methodology seminar having been caught en route by an ex-student who wants advice on books for teaching American English. Tell him what I know, which isn't, I fear, a great deal. Students in methodology seminar, a group of lively, interested girls (a bit of luck getting them) surprised to see me - true I don't like being late and rarely am. Seminar a mad rush which doesn't help. Then teaching exercise and then discover, to my chagrin, that my watch is 10 minutes slow. Feel dreadful and let students, who surely feel twice as dissatisfied as I do, go.

Need a reviving coffee before crossing town for the opening session. Hall totally disorganized, needs furniture moving. Lecture before mine weak, after mine superb. How can I learn to produce and deliver a lecture with the verve and inspiration of my colleagues? After rushing home squashed against the door, I have a quick bite, I relax in the comfortable concert hall overlooking the Danube and listen to my favourite cellist. Incomparable solace for the strains of the day.

WEDNESDAY

April: Even if I'm not in the don's class, my lack of status is well compensated for by the scope of opportunities open to me. As I start the revision of a book on classroom English for Hungarian teachers with my co-author, colleague, I wonder how on earth I'll finish other projects on the go, including two other manuscripts and a video, prelate, admin and teach on summer school before my time is up. (Packing will be time consuming and horrendous, too.)

I should be looking more closely at job vacancies and applying more seriously. Success so far nil. My (to some) impressive publications list and variety of experiences seems to lose weight drastically beyond the border. Ralioce at the prospect of a ten-day escape for the international Association of Teachers of English as a Foreign Language conference, well intended, to code. Easter had May Day. No doubt the conference will give me a more realistic idea of what employment prospects really are outside Hungary as well as bringing me up to date in the field. Being so much in demand here encourages a false sense of importance.

THURSDAY

July: Today sees my last professional appearance in Hungary to be given on the final day of the British Council Summer School. It's also the third day of a training heat wave which might be enjoyable if we had nothing to do. Only one seminar this morning and then a forum in which the panel members are asked the inevitable question about what we like best in Hungary. Just thinking I've evaded answering when my closest colleague draws attention to this. Apart from obvious things like music, cheap wine and cafés - I truly love the café society - I mention the opportunities I've had, which I feel exhausted from exploiting, perhaps too much, at present. Afternoon needed to wind up various things, load council rep's car with books, films and stationery and prepare the tutors' contributions to the party.

FRIDAY

November: Certainly sunk down the scale now as a temporary clerical assistant with the Inland Revenue and not at all sure this is the best way to fight the lethargy of unemployment, though it does provide a (small) source of weekly income about two thirds my monthly Hungarian salary. Realize more than ever the interest and variety of my time in Hungary and joys of teaching. With hindsight all frustrations definitely worth it.

The THES today not very uplifting as jobs I could apply for thin on the ground. Naively I thought it'd be much easier once back in this country. It's only now I fully realize how alienated I became working abroad. Does it happen to everyone or was it only me who aimed at integration with the obvious result of never getting there? Sink deeper into reflections on my lot and what on earth I'm going to do with my future and whether I can face up to it at all.

Feel less than optimistic and miss having a "life". Letters from Hungary telling me how much I did for the students don't help much and I doubt whether they'll impress employers either. Some of my Hungarian friends don't seem to be able to understand how a job for someone who's acquired fluent Hungarian, which (to them) is a language of unquestionable importance and relevance in the world, isn't immediately forthcoming. They imagine universities writing to me or friends coming up with something.

Remember conversation with East German lecturer friend who was simply sent to distant parts but job remained open at home. Here we have freedom to choose at the risk of unemployment, while they have work but with little, or as in this case, no freedom to choose.

SATURDAY/SUNDAY

January: Enjoying a translation on theology from a friend of a friend. My request for paid translation from Hungarian publishing house hasn't produced the possibility in June. Being ineligible for all benefits, something that does not endear me to the system, would certainly make paid work preferable.

Does at least keep my mind working and language up to scratch. Rapidly accepting the fact that prospects of my getting into the lecturing classes in the UK are grim if not hopeless. Yet nomadic life is a strain with no base, security or real sense of belonging. Perhaps I should go in for something entirely different. Consider law though time and money for studying a problem and look to British Council - still nomadic but reasonably secure.

Last publication from Hungary thuds through letter box - a fairly damning textbook review. Well it may not have taken me anywhere but the way I did it was meant to be useful to lots of Hungarian teachers doomed to use the book in question. That's what it's all about, I suppose. Never mind the class but nomadism is hard.

Helen Thomas

The author worked for six years as a lecturer in Hungary for the British Council and is now unemployed.

Visitors give OU full marks

by Felicity Jones

The Open University has been a success story which merits recognition and a show of confidence from the Government.

The concluding words of the visiting committee's report stamp its seal of approval upon the university while recognizing that the corporate will does now exist to contemplate change and achieve cost-effectiveness.

After one of the most detailed and lengthy analyses of the OU's books, the report concluded that the university was being asked to go too quickly too soon towards the Government spending targets notified in a letter to the university in December 1983.

The 13-strong visiting committee representing industry and academia and chaired by Sir Austin Blde, chairman of Glaxo Holdings was appointed by the Secretary of State for Education to advise him on the Open University.

Extra money which could be set aside for new computer facilities and the non-repayment of the PICKUP loan before 1986 coupled with an extra year's grace to reach Government targets will, says the committee, make the university's work more manageable.

But it will still be faced with a difficult task and will need to take measures the effect of which can not yet be fully evaluated.

A large increase in student fees or any immediate reduction in the course profile is firmly squashed. "The very real possibility existed of the OU

becoming predominantly a university for the relatively affluent", said the report.

The committee found that recruitment had already fallen away in the north east, Northern Ireland and Wales and the problem was spreading. Savings in the order of 25 per cent put forward as one scenario by the university which would seriously affect staff/student ratios, contact hours and mailings were also ruled out "as not achievable in the short-term in any rational way."

The university's research programme will inevitably suffer whatever is decided on grant levels and the committee was concerned that effort should be directed towards minimizing the damage.

Protection should be extended in particular to institutional research and the subject-based research groups which have an international reputation for excellence.

The £4 to £5 million which the university anticipated would be needed to compensate staff for early retirements required an early decision from the Government about how much extra could be made available so that the university could plan properly.

Staff savings of the order of 500 posts would, said the report, "affect all areas of the university's activities" and leave some subjects heavily denuded in spite of the protected staff quotas.

The report expressed the fear that though once "at the forefront of new developments" in distance learning,

the OU was in danger of falling behind due to outmoded information processing systems and print production. New money was required here to enable investment in new technology.

"We believe the university is taking seriously the Secretary of State's request to promote a shift to science and technology, but that its ability to make rapid progress is inhibited by the need to concentrate initially on meeting the reductions in funding", the committee found.

The achievements in continuing education have been "impressive" and projects have risen from 29 to 108 last year with income more than doubled.

The problem the committee said was that the pump-priming allowed in other institutions was denied to the OU. Some flexibility in the use of recurrent grants and the conversion of the PICKUP loan to a grant or longer term repayment would ease the burden of the requirement to be self-financing.

The university should be allowed to control the level of its balances so as to build up resources for management and operational purposes, being more commercially orientated.

The visiting committee report welcomed the increased collaboration with the University Grants Committee and National Advisory Body sectors.

The heavy burden of the BBC Centre had to be reduced and the committee thought this could be done by hiding out spare capacity and through reducing programming costs.

Technical Change Centre
'is a qualified success'

by Jon Turney

Science Correspondent

Research council funds for the Technical Change Centre in London should be tied to specific contracts in future, a review has recommended.

The review group, set up by the Economic and Social Science and Engineering Research Council, says the centre has been a qualified success in its first three years. It recommends the "core funding" provided by the two councils should continue after 1986, when the cash from the third original sponsor, the Leverhulme Trust, will cease.

But the group, chaired by Professor Alan Mercer of Lancaster University, felt the conditions attached to research council funding had given the centre too easy a time.

It found that the centre's policy of recruiting individual researchers to do work of their own choice had led to an uneven research record on the centre's overall objective of understanding choice, management and acceptability of technology in the economy.

The group recommends that the centre's governors should start an

immediate search for a new director, to succeed Sir Bruce Williams who retires next year. It wants to be sure the right person is found to give the centre a clear direction and communicate its work effectively.

The original plan for TCC finance calls for £250,000 a year from the SERC after 1985/86, with half tied to specific research contracts, and the same sum from the ESRC, with only £50,000 tied to contract. The group says this implies too much uncommitted core funding and recommends that 80 per cent of the SERC input should be for commissioned work, with a similar shift on the ESRC side.

The report has been accepted by the Economic and Social Research Council, but does not go before the full SERC meeting until later this month. There is a slim chance the SERC will trim the future commitment to the centre, as part of its wider review of all its activities, but the original agreement with the Leverhulme Trust together with the report's conclusion that the TCC has got off the ground reasonably well, will make this less likely.

Advice pledge by CNA

The Council for National Academic Awards has given an undertaking to all teacher education institutions that it will make no institutional commissions when offering its advice to the National Advisory Body on individual allocations.

In a letter to all such institutions, Mr Edwin Kerr, chief officer of the CNA, says that the council considers it its duty to respond to the NAB's request for comments on individual teacher training allocations for 1986/87, and that this is in the interest of public sector higher education.

"But no institution's courses will be compared with those in other colleges, or in any way ranked, banded or grouped for purposes of qualitative distinction. Finally council will not

respond unless it feels that its processes have so operated that fair and responses can be transmitted," Mr Kerr says.

Mr Kerr adds that because of concern over comparability between the advice offered by itself and by the universities which validate, the CNA plans to get in touch with the Committee of Vice Chancellors and Principals' committee which handles university external validating matters and with the Council of Validating Universities.

"With the agreement of institutions I plan sending both bodies in confidence a copy of the draft and final observations on each institution's CNA validated teacher education work. We are hopeful that there will be reciprocity here," Mr Kerr says.

Minister points to overseas support success

Government schemes of support for overseas students were pronounced successful last week by Mr Timothy Renton, junior minister at the Foreign and Commonwealth Office, both in terms of recruitment and cost.

Mr Renton, giving the first annual lecture to the London Conference on Overseas Students, said that the Government accepted a moral obligation towards students from developing countries, especially within the Commonwealth. His decision in 1979 to

charge full-cost fees was just the first stage of a policy of targeted assistance.

Although the main reason for the initial increase was the cost to the British taxpayer, it was not intended simply to limit the number of foreign students, Mr Renton said. The Government had decided to change to a targeted policy of help.

Ministers had given positive support to the Overseas Students Trust in its study of the problem and were now doing their best to see that the money

devoted to student support was spread as widely as possible. At the same time, institutions were being made to compete by the Government ceasing to set fees.

More than £71 million was now being spent on sponsoring 16,500 students on a variety of schemes, he said, compared with an indeterminate subsidy of more than £100 million when full-cost fees were introduced. Total numbers had recovered to 53,000, compared with a peak of 84,000.

EDUCATIONAL
SUPPORT GRANT
RECIPIENTS

READ BEFORE YOU COMMIT YOUR FUNDS...

RM NIMBUS

To: College Computing Co-ordinator
Subject: Educational Support Grants

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Overseas fees gap widens

by David Jobbins

The differential between home and overseas student fees in the universities is to widen further next year while the handful who charge considerably more than the recommended minimum are expected to continue to do so.

This week Sir Keith Joseph, secretary of State for Education announced that home and European Community student fees would rise by 4 per cent in 1985/86 to £1,632 for postgraduate courses (£1,569 in the current year) and £20 for first degree and diploma courses (£200 this year).

In the public sector institutions have been recommended to keep the increase for overseas students to 4 per cent, with minimums of £3,310 for advanced courses and £1,820 for non-advanced.

But the University Grants Committee's recommendations involve increases of more than 5 per cent for overseas students on arts and clinical courses, and 4.8 per cent for science courses.

The recommendations, with this year's figures in brackets, are: Arts £3,310 (£3,150); science £4,350 (£4,150) and clinical £8,050 (£7,650).

To avoid a complete free-for-all, both the UGC and the NAB set recommended levels however, and it seems that most institutions operate these.

This year 34 universities, including 13 out of 18 offering clinical courses, are charging the recommended fee. Of the remaining 16, Bath, Birmingham, City, Dundee, Heriot-Watt, Kings, Reading, St Andrews, Stirling, Strathclyde, Aberystwyth and Warwick

charge up to £100 on top of the minimum for arts and science.

Two universities charge less for clinical courses than the UGC recommends. They are Cambridge (£7,400) and Kings College, London (£7,500). Liverpool, Dundee and Birmingham charge more with Dundee topping the table at £8,000.

A number of universities charge higher fees for special subjects, usually ones bridging the gap between arts and science. Examples include £3,450 for accountancy at East Anglia and £6,000 for bioengineering at Strathclyde.

Top five universities for overseas student fees in 1984/85

	Arts	Science	Medicine	Other
UGC recommendation	3,150	4,150	7,650	-
Aston	3,499	4,599	-	4,083 (combined honours)
Cambridge	3,300	4,200	7,400	-
Liverpool	4,200	6,050	7,900	-
Imperial	3,475	4,475	-	-
Sussex	3,450	4,500	-	-

Science parks 'are not helping economy much'

by Jon Turney

Science Correspondent

University-based science parks in Britain have so far made little contribution to economic development, according to Dr Alun Jones of the Technical Change Centre in London.

Dr Jones argued this case before a conference on science parks organized in Berlin recently by the Commission of the European Communities. He said although the majority of university-based science parks in this country were recent developments, it was clear they were not significant generators of new employment, had not attracted many companies at the leading edge of technology, and had few tenants who had emerged from the associated universities.

However, Professor Frederick Crawford, vice chancellor of Aston University, took issue with Dr Jones' view. He said that the University of Engineering in London

last week, arguing that it was much too soon to evaluate British science parks. Professor Crawford, who takes developments at Stanford University in California as a model, stressed that the pay-offs took a long time. "The likelihood that a university would have a second source of income from a science park is very small for a very long time," he said.

Professor Crawford looked to the day when the park now under way at Aston moved out to occupy extra space on an industrial estate on the outskirts of Birmingham, probably in collaboration with the similar ventures mounted by Birmingham and Warwick universities.

Dr Jones' reservations about British science parks were backed by other speakers at the Berlin meeting, and by recent paper from Dr Ray Oakley of the Centre for Urban and Regional Development Studies at Newcastle University.

ILEA proceeds with art merger

The Inner London Education Authority has forged ahead with plans for a single institute for the arts despite requests for a postponement from college lecturers.

The plan will bring Camberwell, Central, Chelsea and St. Martin's schools of art, the London College of Printing, the London College of Fashion and the College for the Distributive Trades together by January 1986.

Further discussion will be held over the London College of Furniture to consider its future as a part of the institute or linked with other institutions.

Mrs Frances Morell, the ILEA's leader promised the colleges would retain their separate identities while combining into "the most formidable educational base for art, design, related technology and specialist studies in western Europe".

The National Association of Teachers in Further and Higher Education, Inner London region, said the decision postponed until May so that the proposals could be assessed fully. The college lecturers are not necessarily opposed to the plan but wanted the full report of the academic steering committee to be made public beforehand.

Oxford puts up costs for outsiders

by Peter Aspdon

Fees paid by outsiders to attend Oxford University lectures are to go up from £35 to £250 a term.

The sharp increase is seen as a clampdown on overseas universities - mostly from the United States - which have set up permanent bases in Oxford for their students.

They spend a term or a complete academic year in Oxford as part of their course and take advantage of university lectures for the hitherto small fee of £35 a term.

The university's Information officer, Mrs Anne Lonsdale, said: "The growth of these institutions has been particularly prominent over the past couple of years, influenced by the strength of the dollar against the pound."

"The universities in question advertise their Oxford bases extensively - and use the access to university lectures as part of the attraction. Then they charge tuition fees of £500 to £600 a term. It is a totally commercial enterprise."

"We thought it was only right that the university should increase the fee and charge a reasonable and economic price for attendance, rather than the burden resting on the taxpayer."

Mrs Lonsdale added the fee rise would not affect "bona fide travelling students" who could still attend lectures for free if they obtained permission from the lecturer.



A student takes his last few steps after completing the "Bogle Stray" 55-mile sponsored walk through Lancashire, organized by the University of Manchester Institute of Science and Technology in Manchester and Salford.

About one-quarter of the 1,600 starters finished, and three-quarters of all walkers needed some sort of help with their feet. The aim last week was to beat the previous year's sum raised of £25,000.

Authorities still provide lion's share of YTS

Local authorities' contributions to the Youth Training Scheme in 1985 are to remain substantial in spite of the Manpower Services Commission's move towards an entirely employer-led scheme, the latest Local Government Board survey shows.

Only 53 out of the 353 local authorities which responded said that they would not participate in YTS this year, about the same proportion as last year.

The majority of places will be provided by the shire counties, around 44 per cent, followed by the metropolitan districts, over 32 per cent, and the districts with some 19 per cent of the places. This compares with figures for last year of 50 per cent shire, 29 per cent metropolitan and 16 per cent district.

The survey also shows that the number of places being offered - around 52,000 compared with the normal intake of 16-year-old school-leavers, around 1,600 in 1983/84 - is far in excess of the numbers required under the MSC's additional rule.

The survey also shows that local authorities planned to offer the

greatest number of programmes and places under Mode A1 (those courses in which the managing agent sponsors the entire programme) around 16,000. The second highest number of places are to be offered in Mode A2 (courses where elements of the scheme are subcontracted) - nearly 10,000 and under Mode B1 - (company projects) some 9,000 places.

As far as local authority involvement is concerned, the highest number will be involved in Mode A programmes as sponsors, around 99 of them, followed by Mode A2 and Mode B1. The lowest involvements will be Mode B1 sub-sponsoring workshops.

The survey also traced the take-up of places during 1983/84 and of movement. In all but one programme, those run by consortia, the total number of trainees actually exceeds the greatest number of places occupied at one time.

According to the LOTS table, which contains a list of trainees turnover, in fact the number of trainees staying 12 months on a programme is less than the total number of places occupied at that programme.

options. And, more obviously, they have always regarded their day as defending their minister. Whether Tory or Labour, a minister has always been able to count on the civil servants to provide him with ammunition to knock down his opposition case.

It is easier in fact to change the machinery than ideas. For all the many positive qualities the Prime Minister has not been able to shake the harshness of her approach (the necessary though a shock to the system has been, whether it is industrial or educational) in a way that could carry a broad consensus. Indeed, she has positively thought the attempt would be a distraction and weakness. But she has been lucky - and still is.

The country is faced with an opposition which is not only divided - that is par for the course - but one which instead of mid-term elections, has been cast into a deep fatalism. Too many of its members no longer believe they are capable of winning power. Neil Kinnock's growing pains are beginning to look pretty terminal.

Keith Hampson

The author is Conservative MP for Leeds North-West.

SERC to review engineering

by Jon Turney

Science Correspondent

The Science and Engineering Research Council is mounting a review of the work funded by its engineering board.

The council wants to assess the effect of its greatly expanded programme of engineering research and development on education, industry and the economy.

The review will be conducted partly by council members and partly by outside teams at the Science Policy Research Unit, based at Sussex University and the Technical Change Centre in London.

It is the first large-scale appraisal of the engineering board's work since the council changed its title to include engineering, and marks an increase in spending in the area. The engineering board's expenditure has risen from 18 per cent of the council's budget in

1979/80 to 24 per cent today. It now stands at over £60 million a year.

Both the Advisory Board for the Research Councils and the SERC are anxious to see this money well spent.

The review will be overseen by three council members - Professor Brian Clarkson, principal of University College, Swansea; Dr Cyril Hilsom, chief scientist at GEC's research laboratories; and Professor William Mitchell of the Clarendon Laboratory at Oxford University.

Earlier SERC reviews of nuclear structure physics and space science were in-house efforts, but the engineering review will also draw on outside expertise. The Technical Change Centre is already examining the economic significance of engineering board research and the Science Policy Research Unit has just begun a feasibility study to look at assessing the board's work on other criteria.

The initial SPRU study is expected to be completed by July and the overall review by the end of the year. This would permit the council to consider the results when it prepares its new forward look next year.

The council faces an unusually difficult job reviewing engineering, which is the favourite target for critics with their own prescriptions for SERC policies geared to boost technology and the economy. The multiple objectives of engineering board work will also make evaluation difficult.

The board itself has recently completed its own study of the future needs of engineering research. However, this does not dwell on retrospective judgments but looks at measures to strengthen support for engineering research and development. The two reviews together will shape the council's policy towards engineering for the next decade.

Edinburgh closes Koestler lists

Edinburgh University has received applications from throughout the world for its Koestler chair of parapsychology. The chair is funded by a £700,000 bequest from the writer Arthur Koestler, and his wife Cynthia, who committed suicide together two years ago.

Today is the closing date for applications. Dr John Beloff of Edinburgh University's psychology department, and a trustee of the bequest, said academics from Europe, Australia and the United States had already applied.

Soviet twins

Students at Sheffield University are to establish what they believe is the first twinning agreement with a Soviet student organisation. A delegation is to visit the Soviet Union next month to discuss possible sporting and cultural links with students from Donetsk University.

Lowry lore

Salford University, in conjunction with the city's museum and art gallery, is to launch a series of Lowry weekend tours. As well as talks by experts and visits to collections of paintings, the holiday makers will be able to visit a black pudding maker and take part in a "Lancashire evening", featuring traditional food and clog dancing.

Tender approach

The Open University has been awarded a tender by the Secondary Examinations Council for the production of in-service education material to help teachers prepare for the new General Certificate of Secondary Education. Manuals will be produced by the OU and the BBC will be asked to produce video tapes.

New experience

The new occupant of the chair of continuing education at Sheffield University, which has been vacant for two years, will take over as director of a new centre for post-experience vocational education. An appointment is expected with in the next month.

London lecturer elected as new Natfhe vice president

by David Jobbins

A London college lecturer has been elected to his union's highest elected office in the face of competition from a leading left-winger on the union's national executive.

Mr Ken Childhouse, who lectures in local government administration at the West London Institute of Higher Education, became vice president of the National Association of Teachers in Further and Higher Education at the end of May and will be the union's president in 1986/87.

In a postal ballot he received 6,884 votes to beat his rival, Mr Brian

Jones, by 2,489 votes. A former Natfhe president, Mr Chris Minto, was elected treasurer in a four way contest. Another former president, Mr Cecil Robinson, and Oxford Polytechnic lecturer Dr Alan Vella, were eliminated in the early rounds of counting, and Mr Minto received 5,113 votes against the 4,780 votes cast for his nearest rival, Mr Alan Watkins.

Barely 17 per cent of the 66,742 Natfhe members eligible to vote in the elections did so. Mr Jones, who also unsuccessfully contested the election last year, had the support of the union's Broad Left organization. Mr Childhouse achieves the rare

distinction of election as vice president without having been a member of the national executive. However he sits on the union's national council as well as his own outer London regional executive.

A member of the Labour Party, he fought four Parliamentary elections in the Harrow and Wembley constituencies between 1964 and 1974.

He regards the current salaries campaign as the most immediate priority but is also anxious to bring adult education in its broadest sense firmly on to the union's agenda.

He dismisses any suggestion that his victory implies that the membership

Candidate pledges to stamp out privilege

Oxford University students' union looked set this week to elect Mr Colin Douglas, a final year student in politics, philosophy and economics at Keeble College, as its first ever black president.

But Mr Douglas, who will be running under the Labour ticket with vice presidential candidate Duncan Enright, says that recent national press coverage of his election campaign has focused on the race issue in "a patronizing and trivializing manner".

"The essential issue of this campaign is not that I might become the first ever black president of Oxford University students' union. In so far as race is an issue here, it is the gross underrepresentation of black students at Oxford and in the British university system generally, which I am concerned with," he said this week.

Mr Douglas argues that the only way to increase the number of blacks at Oxford is to reform the entrance procedure so that a greater number of applications come from the state sector.

At the beginning of the next academic year, Oxford will introduce the reformed admission system which restricts the special entrance examination to pre A level students only. The move is designed to eliminate the advantage given to public school applicants.

Mr Douglas went to Tulsa Hill Comprehensive in south London and got into Oxford under the now disbanded Inner London Education Authority assisted places scheme to apply. If elected, he will press for the "downgrading" of the remaining Oxford entrance exam to bring it closer in line with the Universities Central Council on Admissions system.

Although the number of entrants to Oxford from the state sector exceeded those from the independent sector for the first time last year, Mr Douglas says that a massive section of the comprehensive sector still has no contact at all with the university.

He intends to expand the union's Target School Scheme which aims to rectify Oxford's alleged "Brideshed" image by sending undergraduates to certain key comprehensives to persuade potential candidates to apply. Mr Douglas also plans to introduce a similar Target Teachers Scheme.

"Oxford is slowly coming into the 20th century," he said this week. "But it still has an awful long way to go."



Personal File

Concern voiced on adult provision

Adult education in Wales is caught in a downward spiral which the increase in course fees is unable to prevent, a Welsh extramural department director has warned.

Professor Alwyn Roberts of University College of North Wales in Bangor said that although the universities and the Workers Educational Association in Wales had not been treated to such severe financial cuts as their English counterparts, the local authority provision has been severely hampered.

Even so, Professor Roberts said that his department would be unable to replace one out of eight full-time tutors due to the discrepancy between the real cost and the Treasury estimates for inflation.

The Government has taken criticism seriously and has agreed to set up a Welsh office of the National Institute of Adult Continuing Education with funding of £33,000 over the next three years.

The new adult education office will be based within the Welsh Joint Education Committee and will be responsible for local projects of the United Kingdom Development of Adult Continuing Education as well as those aimed at Welsh subjects and bilingual projects.

It is seen as a symbol of goodwill by Welsh adult educators but they do not think the new office will compensate for the real reduction in resources.

Certain authorities like Powys and Dyfed county councils are finding it very difficult to maintain their adult education provision in areas of rural and scattered populations.

Students seek rules change

Edinburgh University's students association is seeking a change in the electoral election regulations following the rejection of the nomination of jailed black South African leader, Mr Nelson Mandela.

The students hoped that they could find some legal loophole after Mr Mandela's nomination was last week ruled invalid since he has not signed the acceptance form. The prison authorities refused him permission to sign, although he accepted verbally. Mr Mandela's lawyers sent the university a message by telex saying a letter of confirmation would follow, but this has not arrived, and the students fear it may have been intercepted.

The Conservative MP, Mr Teddy Taylor, this week launched his rectorial campaign by saying he opposed student loans and tuition fees for overseas students. The other candidates for the rectorial election are Ms Margo MacDonald, broadcaster and former Scottish National Party MP; BBC football presenter Mr Archie McPherson; and art promoter and artist Mr Richard Demarco.

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Teaching Sir Keith a lesson

In December last year, the Advisory Committee on the Supply and Education of Teachers submitted its advice to the Secretary of State on the teacher training places required from 1986 onwards in order to meet the needs of the schools. Its main recommendation was a 49 per cent increase in primary training places and to sustain the level of provision for secondary places in order not to place at risk the ability of the system to expand when the demand for secondary teachers rises at the beginning of the next decade.

A sufficient supply of well trained teachers in the right subjects and age ranges is obviously critical to Sir Keith Joseph's plans to improve the quality of teaching in the schools. He was expected to respond by the end of January, instead it now looks as though it will be the end of February at the earliest before any response is received. In the meantime Sir Keith has announced his decision not to reconstitute ACSET when its present three-year term comes to an end in April.

The problems of effective planning of teacher education are well known and the consequences of past failures to plan effectively have had dire consequences for the public sector. We have repeatedly warned of the dangers of excessively reducing

It comes as no surprise therefore when ACSET concludes that even allowing for re-entrants to primary teaching who already fill a substantial share of primary vacancies, not enough primary teachers will be produced to meet school staffing needs if they are to effectively respond to the additional policy demands of the Secretary of State. If his policies on teaching quality are to be secured he has to create the additional training places now.

But there is an even more serious concern: The National Advisory Body is starting its next planning round at Easter this year. It is trying to square the circle of rising student demand and falling resources. It has already warned that the unit of resources in the public sector cannot be allowed to fall still further. If therefore a proportion of any primary training expansion is to be met by the public sector and the public sector makes by far the greatest contribution to primary training - then it seems inevitable that such places can only be created at the expense of other courses unless additional resources are pumped into the sector.

Moreover, those institutions which in the mid 1970s, at the urging of central government diversified their provision, developing other degree and diploma courses, will now find themselves caught on the horns of a dilemma. To the extent that they are willing to increase teacher training places they may have to reduce places in other programmes.

All this of course could have been avoided had the Government not been so obsessed with the need to contain expenditure that it was unable to see beyond the next three or four years. Now the chickens are coming home to roost with a vengeance.

Jean Borcock

The author is the assistant secretary, Higher Education at the National Association of Teachers in Further and Higher Education.

Fresh cuts may mean 1,000 AFRC jobs

by Jon Turney
Science Correspondent

The Agricultural and Food Research Council faces fresh losses of up to 1,000 jobs in a new round of cuts, according to the three main scientific staff unions. The job reductions would come on top of 800 posts going in the restructuring programme already under way.

The unions - the Institute of Professional Civil Servants, the Association of University Teachers and the Association of Scientific, Technical and Managerial Staffs - make this estimate in a memorandum to the House of Commons education, science and arts committee's inquiry into the science budget. The three are campaigning for more science cash under the banner of the "Alliance for Science".

Their memorandum says cuts in the Ministry of Agriculture and Fisheries research budget announced in the recent White Paper on future public spending will have a "devastating effect on the AFRC. The unions estimate the £10 million coming off the ministry's research spending in 1986/87 would mean a 15 per cent reduction in the £50m a year commissioned research income going to the AFRC.

The memorandum attacks the existing programmes of redundancies in the Agricultural and Food and Natural Environment Research Councils, which it estimates will cost £20m over the next three years. And it says the new agriculture cuts will make matters worse.

Part of the reason for the Ministry of Agriculture cuts lies in last year's Cabinet Office review of British Government research and development,

which identified agriculture as an area receiving more research support relative to its economic importance than other countries. The note from the Advisory Council for Applied Research and Development which goes with the report to the Prime Minister drew special attention to the agriculture figures.

The council argues that the comparison used in the Cabinet Office review makes invalid inferences from figures compiled by the Organization for Economic Cooperation and Development. The AFRC points out that if the figures are recalculated to give a rate of spending per head of population we actually spend less than other countries in the European Community.

The Advisory Board for the Research Councils is arguing strongly that the effects of the MAFF cut should not be borne from within the general

science budget, and will use the culture case to back its view that procedures are needed for allocating the costs of research spending in different Government departments.

The Alliance for Science's aim in a separate pamphlet published last week, is to create a cabinet post for minister for research and development, as part of a new machinery for developing a national research strategy.

The unions want more cash for research and development, according to a strategy developed by the minister, a cabinet committee on science and a new committee of the National Economic Development Council, which brings together government, employers and unions to discuss key economic and industrial issues.

Animal rights groups intimidate researchers

by David Jobbins

Academics involved in experiments with laboratory animals have been subjected to threatening letters and phone calls and demonstrations outside their homes, according to the Association of University Teachers.

Members of their families have suffered verbal and sometimes physical abuse in what the AUT condemns as totally unjustified acts of intimidation.

The union is likely to respond with a clear policy statement setting out the responsibility of scientists to cause minimal pain, use animals only when no alternative is available and to accept the responsibility of explaining their activities to the general public.

The union is so far satisfied with the response of individual universities to the victims of attacks and there has been no need for national officials to be drawn into any disputes. This would

only happen if AUT members had been dissatisfied with the support and protection offered by the universities in a disputed insurance settlement.

The AUT's February Bulletin draws attention to the publication of members names in animal liberation groups' publications and other incidents reported in national newspapers. It concludes that elements within the movement have decided to adopt aggressive and violent means.

The AUT's assistant general secretary, Mr Paul Cottrell, said: "People have a responsibility to explain their experiments and why it is necessary to use animals, and behave accordingly."

"We would support the use of animal experimentation in some circumstances but would like a more balanced approach, saying that animals should only be used where there is no alternative and then only subject to strict guidelines."

Scottish society intensifies battle against professors

by Olga Wójcik

Scottish Anti-Vivisection Society is to step up its personal campaign against two Glasgow University professors involved in controversial brain damage research in monkeys.

The society's decision follows a meeting of Glasgow University court which backed the continuation of the research between Glasgow and the University of Pennsylvania, and condemned the society's "harassment of university staff and their families".

The court accepted the recommendations of an ad hoc committee that the research should continue. There had been malpractice in the Pennsylvania laboratories in the past, but the university said they have now been inspected and approved by an independent group.

However, the society claims that the Glasgow inquiry is a "whitewash", and adds that the independent group, the American Society for Neuroscience, is "famous for protecting the work of even the most sadistic scientists".

Mr John Robbins, the society's organizing secretary, said: "When the university court turned down my offer to view, all 70 hours of unedited videotapes of his horrific research it

became clear that only a personal decision by the researchers will break the Glasgow University link with the subject."

The society has prepared leaflets and newspapers featuring Professor James Adams and Professor David Graham of Glasgow's department of neurophysiology and next weekend will begin circulating them in the two professors' neighbourhoods, at the Southern General Hospital where they work and at the university.

Glasgow receives the frozen brains of monkeys which have been subjected to pressure to create brain damage in Pennsylvania. The anti-vivisection society leaflets urge people to write to the two professors, to the dean of the medical faculty, to the university court and to local MPs to help force a full independent inquiry into the affair.

The leaflets include stills from videotapes of the Pennsylvania experiments. One shows a laughing monkey holding up a braindamaged animal. On the tape, a voice off camera says: "You better hope the anti-vivisectionists never see this."

Mr Robbins said the professors are "happy" that they would go away and the "empty reassurances" from Glasgow University. "Nothing could be further from the case," he said.

Secretary has discrimination case dismissed

A college secretary who claimed she was victimized and discriminated against by her employers after making allegations of sexual harassment against a superior, had her application under the Sex Discrimination Act dismissed by a Cardiff industrial tribunal last week.

Mrs. Regina Margaret Cornelius, of Higher Lems, Langland, Swansea, claimed that a refusal by her employers, University College Swansea, to reinstate her as regional secretary was the main reason for her discrimination. She alleged that the college had discriminated against her by refusing to reinstate her.

She was transferred to another sector after complaining that the college's director of finance Mr William Harrison had made sexual advances towards her.

But Mrs Cornelius was unhappy with her new position as secretary of the Taliesin Arts Centre and asked to be returned to her former job. This was refused by the college, who said that the question of reinstatement was a closed matter following the findings of an internal committee.

The college had not victimized or discriminated against Mrs Cornelius by refusing to reinstate her, Mr Harrison, secretary, said Mr Blair. "It would have been impossible for such a

relationship to work and we think Mrs Cornelius knew that very well," he added.

Mrs Cornelius had been away from work since October because of ill health, but would be facing dismissal on her return because of her refusal to carry out box office duties.

Mr Blair said that he found her attitude "incredible" after her employers had taken steps to try and carry out box office duties.

Mrs Cornelius, who has a special hearing pending at the court of appeal in relation to an earlier tribunal decision, is going away to consider her future. He added: "Who'd be a woman? I'm coming back as a man next time."

US biotech lead 'may be lost'

from William Norris

WASHINGTON The United States' world lead in biotechnology is under threat from President Reagan's proposed budget cuts. At least, that is the fear of private biotech firms, who for years have been using the discoveries of university scientists, funded by federal grants, to develop new ways of treating disease, growing crops, producing chemicals and flavour food.

The past four decades of federal support for biomedical research have produced the scientific knowledge and the scientists which are the basic resources of the biotech industry. Now that the Reagan axe is poised, the question is whether private business will be willing, or able, to pick up the slack and fund academic research itself.

David A. Jackson, senior vice president and science director of Genex Corporation said: "The reason the industry is as healthy as it is today is because of the nation's science base, which must continue to be nurtured." Mr Jackson's work on genetic engineering at Stanford University was partly supported by government grants.

On the face of it, Mr Reagan's budget is not too harsh on the researchers. Funding for the National Institute of Health (NIH), which provides the main channel for research funds in this field, is actually scheduled to rise by 4 per cent in 1986. However, some creative accounting by the management and budget office is largely responsible for this. Although Congress agreed to fund 6,526 new research grants in 1985, the administration stepped in and ordered the NIH to fund only 5,000 new projects, and to save the money left over for future years. The proposed 1986 budget will also limit grants to \$5,000, and trim the new appropriation to \$4.9 billion from \$5.1 billion.

The cut in grants will not affect research which is already under way, but it will intensify the competition among projects seeking initial funding. President Reagan also wants the number of research centres cut back from the current total of 496 to 455, although Congress last year approved funds for 533.

"There is strong concern that this shows a general lack of foresight," said Harvey Price, executive director of the National Biotechnology Association. "There is a lot of research in biotech to be done which will yield new discoveries and new commercial opportunities."

The worry is not that high-flying research will suffer. The type of biotech work which leads to Nobel prizes will still receive funding. But more mundane projects which lead to commercial use are under threat, and it is this which has the industry worried.

It suggests introducing correspondence courses on a big scale to cater to those who wish to go in for higher education but who might no longer be inclined to do so in the formal sector, once many jobs are not made conditional on the possession of a degree.

At the same time, in the formal sector, it does not want any new undergraduate colleges to be opened since half of the existing ones are, it says, non viable.

On secondary education, the panel says that the data submitted to it show that there is one primary school in a one-mile radius and one secondary within every three kilometres. It calls for more primary and secondary schools and for improving facilities in them so as to make school education meaningful. Existing resources should also, it urges, be used to the full.

Professor Haakon Vastling, rector of Lund University, said the university had the right to refuse its facilities to the Iranians, though no measures would be taken for the time being beyond informing the board about the protest.

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Japan threat to quit Unesco

by Geoffrey Parkins

Japan has threatened to join the growing exodus from Unesco if it does not implement its reform proposals by the end of 1985.

The announcement was made in Paris by the Japanese delegate Mr Takaaki Kagawa at a special meeting of Unesco's executive board, which has 50 members.

Mr Kagawa said there was grave and increasing concern in Japan over the running of the organization and the Japanese government was far from satisfied with the reforms that had been implemented since the United States gave notice of withdrawal in November 1983.

At the moment Japan is Unesco's second largest contributor after the Soviet Union (15 per cent) paying 13.5 per cent towards the organization's annual budget of \$391 million, and its withdrawal would clearly put Unesco's already reduced finances under further strain.

The loss of the United States 25 per cent contribution means that Unesco has a shortfall of about \$43 million for 1985. However, Unesco has managed to reduce this figure to around \$28 million by making internal economies in recent months.

Among Unesco's major projects undertaken in Japan in recent years has been its assistance in developing and expanding the International Institute of Seismology and Earthquake Engineering which has been responsible for training several hundred graduates, the establishment of an Asian institute for the promotion of mutual appreciation of cultural values and the study of Asian civilizations, and the creation of centres for the training of specialists in book production and marketing.

Japan is the second Far Eastern country to threaten its withdrawal from Unesco at the end of 1985, after Singapore's announcement in December 1984.

Meanwhile, at the same special session of Unesco's executive board, a major row appears to be brewing between Western and third world nations as to how member-nation contributions and other financial adjustments should be arranged subsequent to the loss of the United States contributions and currency fluctuations.

Western nations, including Britain are determined that budget contributions from member nations should not be increased to make up the shortfall,

and that in the absence of any adequate voluntary contributions, the only solution is for Unesco programmes to be cut. But third world nations do not want this to happen and while some appear to be prepared to make extra voluntary contributions, others are proposing that \$50 million due to be returned to certain nations because of currency fluctuations should be retained by Unesco.

The matter of the United States budget contributions is by no means over, for Unesco's secretariat maintains that the United States is still legally obligated to pay the remaining half of its contribution for 1984/85. Unesco's executive board is reported to be considering whether or not to take its case to the International Court of Justice at the Hague.

Further to this both the United States and Unesco claim the other owes money because of complications arising from currency exchange fluctuations.

Finally, despite its recent withdrawal, the United States is reported to have written to Mr Amadou M'Bow, Unesco's director-general demanding the right to send its own observers to ensure that reform proposals are carried out.

Report calls for greater emphasis on vocation

from A. S. Abraham

BOMBAY Separating degrees from jobs and greater vocationalization are the two main proposals in a short-term report that a specially appointed, high-level, three-member educational panel has submitted to the federal government.

The members are the vice-chancellor of Jawaharlal Nehru University in New Delhi, the director of the National Council of Educational Research and Training, which is a federal advisory body on school education, and a JNU professor.

The panel's formation was announced by the prime minister, Mr Rajiv Gandhi, soon after he took office, but it had been constituted well before he took over.

While recommending that a degree should no longer be a prerequisite for a range of jobs, the panel calls for a strict, centralized examination system for recruiting government employees. It wants vocationalization to be the responsibility of not only the education but of every ministry. The public sector enterprises should cooperate with educational institutions in training personnel for particular jobs.

To remove the stigma of low status that attaches to vocational learning, it wants the provision of facilities for those who dropped out of academic courses for economic reasons but who wish later to resume them. It suggests a quota of seats in colleges and universities for such students.

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Gandhi announced panel's formation

those who wish to go in for higher education but who might no longer be inclined to do so in the formal sector, once many jobs are not made conditional on the possession of a degree.

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Staff protest at Iran plan

from Donald Fields

HELSINKI Staff at Lund University, southern Sweden, are trying to block a plan to educate students from Iran at the university's dental department 12 miles down the road in Malmö.

Seventy-six professors, readers and research assistants in the medical faculty have protested because of Iran's human rights record. Similar action has been taken by associations of Swedish dentists, and by students in the national federation and the departments affected.

Following the withdrawal from the scheme by Sweden's health, a regional public enterprise, because of "practical difficulties", the semi-nationalized company Swedec International has bid for a £6 million to £12 million contract that will permit the training in Sweden of 50 Iranian student dentists over six years. The deal will be strictly commercial, and completely outside the scope of Sweden's munificent development assistance programme.

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Interpreting the Russian

David Ljunggren on three months' study in Minsk

Three months as a student in the Soviet Union proved to be quite an eye-opener for 48 undergraduates from English universities. Life in higher education in Minsk, Leningrad and Voronezh left the students partly impressed and partly disappointed by what they saw.

The free atmosphere in tutorials and seminars that English students take for granted was noticeable by its absence in the Institute for Interpreters in Minsk. There was a rigid barrier between students and teachers and the English students felt as though they had been transported back to the fifth form.

Soviet students are expected to rise when the lecturer enters the room and replies to questions are similarly polite. Soviet students claimed that they too enjoyed relaxed relations with their lecturers, but this was not evident.

The workload of average English students pales into insignificance when compared to that of their Soviet counterparts. The latter studies for at least 40 weeks a year and is also set large loads of homework. The students themselves do not find this unusual, but the teachers confided to the English students that they considered the work to be far too heavy.

Lectures started at 8.15 every day from Monday to Saturday (the English did not attend on Thursdays). The English students certainly suffered from this enforced early start and by the end the majority were

exhausted. The Soviet students suffer too and are often to be found in bed once lessons have finished.

Teaching methods are far more rigid than in England. The textbooks were unimaginative and the teachers' refusal to deviate from them occasionally increased the tedium of the lessons. Questions by simply reading them straight from the textbook. Language laboratory work consisted of repeating sentences and word fragments ad infinitum. The translation and oral lessons proved to be among the most useful method of improving the students' Russian.

By continuous repetition of set phrases and the enforced learning of long lists of idioms Soviet students certainly become more fluent than their English counterparts, but the rigidity and inflexibility of the teaching did nothing to dispel the impression that they are partially conditioned to reply in a set way to certain phrases. Once the time came for improvisation their language control became markedly worse.

But the level of the average Soviet students' English is noticeably higher than that of his English counterpart's Russian.

Soviet students who achieve respectable examination results receive a monthly grant of around 45 roubles compared to the 145 roubles the English

received. Without parental help they could not afford to continue studying. Students who do not achieve the desired grades receive reduced grants making them even more dependent.

The cult of child worship in the USSR continues into higher education. Parents feel obliged to contribute to their children's living costs. Some students augment their grant by taking jobs, but the majority expect to be subsidised by their parents.

Soviet students are less independent than the English. Once they graduate they know that the state will provide them with a job. The resulting lack of personal initiative and drive worries some Soviet intellectuals, who consider that precisely those two qualities are most important in the struggle against the USSR's economic inefficiency.

Each institute has its own hostel. The English students all shared triple rooms with at least one Russian. Relations with students and administration were relaxed and beneficial to both sides. After a food-poisoning episode early on in which the two main protagonists found themselves in a ward for the clinically dead, the stay was virtually trouble free.

Despite the differences most of the English students returned convinced that their Russian had improved and only regretted that the cuts have prevented more schemes of this kind.



Tax barrier means win for minister

Over the past decade the federal and provincial governments have vied to outdo each other in the race to underfund the universities. As the crisis in post-secondary education became public, it was probably only a matter of time before one of them struck on the idea of blaming the victim for causing it.

As pieces of buildings rained down on students, politicians did what came naturally, revised history, looked outraged and appointed a commission with a set of guidelines that would result in shifting responsibility for government policy failures.

The Minister of Education in Ontario appointed just such a commission in 1983, the Commission on Future Development of Universities in Ontario.

The minister left no doubt what assumptions she expected the commission to take as read: first, that the current underfunding should be understood to be generous funding, and secondly, that the "differentiation" (or "down-sizing") as the Americans call it of Ontario's universities was the (tidal) wave of the future.

The commission resisted the temptation to attack tenure. Significantly, the report does not recommend the closure of institutions or faculties, nor does it opt for centralizing decision-making or planning. In fact, it specifically rejects centrally-controlled and directed (i.e. ministerially run) "differentiation". Furthermore, the commission recommends that all Ontario universities should continue to offer coherent undergraduate programmes and engage in research.

In dealing with the large-scale retirements of an aging professoriate the report recommends the creation of a special fund to appoint 550 younger faculty.

Perhaps most importantly the commission rejected the minister's view that current funding levels were as given. Unfortunately, the commission "found" the "new" money, however, either in students' pockets or in the federal government's treasury. The commission has recommended that the universities be allowed to decrease their enrolments on average by 6 per cent without any change in government funding.

The commission recommends that fees be increased substantially so that the university system could raise an additional \$15 million. Although the commission clearly hopes that if governments cannot find the estimated \$91 million in additional funds needed to restore and enhance quality and accessibility, then student fees should increase steeply.

Even though the commission combines this scenario with the recommendation of the introduction of a contingency repayment scheme (through income tax) in order to introduce an element of equality of opportunity to university, this is clearly an exercise in political malvolity.

The complications of the income tax system and the inability to calculate potential future debt will act as a significant barrier to those not wealthy enough to make the tax system work for them. If the recommendations on fees are acted upon, the minister will surely win: cheaper universities and fewer students.

Ron C. Levesque
The author is associate executive secretary of the Canadian Association of University Teachers.

Research funding 'must be doubled'

from Geoff Maslen

MELBOURNE

Australia's principal research funding body—the Australian Research Grants Committee—has called for a doubling of its allocation from the federal government over the next 12 months. In a strong expression of its concern at the government's lack of support for basic research, which the ARGC describes as "dismal and each year bears less and less relationship to national needs", the committee calls for new initiatives to back Australian researchers.

Because original ideas are unpredictable and their ultimate value impossible to assess in advance, support for research must be responsive, not directed, the committee says. Basic research also requires a long-term perspective so that governments have to recognize the worth of investing in knowledge that may only yield benefit in the future.

To meet the need for new researchers, the committee calls for the establishment of postdoctoral career fellowships to be offered through the Australian Research Grants Scheme. This idea died for lack of funds last year, but the committee believes the case for career fellowships is still urgent.

The committee also says that surveys of postgraduate education have highlighted the need for more postgraduate awards, and it proposes allocation of A\$2.5 million to provide for 30 fellows in the lecturer/senior lecturer range, plus 20 postgraduate awards.

As well as helping new researchers, the committee argues that there needs to be more international visibility and overseas contacts for Australian researchers.

The ARGC says there should be support for a small number of Australians engaged in significant collaborative research with scientists in other countries; financial assistance for a number of leading research workers from other countries to participate in ARGC-funded projects; and money to assist overseas scientists travelling to specialist workshops in Australia, as well as Australian researchers being helped to travel elsewhere.

To meet these new commitments, as well as supporting the level of research "appropriate to Australia's size and state of development", the committee says almost A\$36 million will be necessary.

The chairman of the committee, Professor Peter Sheehan, points out that the level and proportion of direct funding for research obtained from "mission-oriented" sources has risen from around 25 per cent 10 years ago for all universities, to well over a third today. Universities are also moving increasingly in the direction of contract research funded by industry and government.

Professor Sheehan says that unless massive amounts of funds are injected into Australian research to strengthen its knowledge base and provide it with permanent labour power for the future, permanent damage will occur.

"Many young researchers of good quality face an absence of research support in the next decade unless new attitudes and policies are adopted by universities and government alike," Professor Sheehan says. "Academic staff are currently captive in Australian universities without any regular injection of new blood to refurbish their ideas and move them to new and exciting phases of intellectual enquiry."

University makes English language pass compulsory

by Geoffrey Parkins

A pass in English language will be compulsory on all matriculation and degree courses at the University of Sains Malaysia (USM), Penang, from the beginning of the new academic year. Many other Malaysian universities are considering the same policy.

The USM's vice-chancellor, Dato Musa Mohamed, announced the new ruling at the university's annual degree ceremony. He said that under the present requirements, students failing in English could still receive an award. But under the new ruling, students who fail the English component of their courses will not receive a certificate.

Despite recent pressure from the government and bodies like the Congress on Malay Language and Letters, urging the universities to intensify the use of Malay language in all fields, Dato Musa said that students and graduates obtain government posts—one of the few avenues where the Malay language is extensively used. Many, he said, would be entering the private sector where a mastery of the English language was vital.

The new ruling has clearly angered many senior Malays, including some government officials, who have expressed their impatience over the slow pace with which the government's Malay language policy is being implemented. They also object to the

persistent, widespread use of English as the main language in many areas of higher education, medical and scientific research, commerce, industry and the business world generally. It is becoming apparent that adoption of Malay has not been as widespread as thought.

The government and the education minister, Dato Abdullah Ahmad Badawi, in particular, have lately been under increasing pressure from Malay interest groups to take action to ensure full acceptance of the Malay language. Last December the Fourth Congress on Malay Language and Letters called on the government to amend existing laws which hindered the full implementation of Malay. It wants new legislation to give the government power to monitor and enforce the use of the national language in all fields, including the private sector.

However, it is unlikely that the government will adopt such a draconian approach and Mr Badawi is known to favour a more patient and gradualist approach.

Speaking on the national language issue in Kuala Lumpur recently, Mr Badawi expressed his own disappointment with the progress made so far. He promised a complete review of the 1965 National Language Act to establish to what extent its objectives have been achieved and consider if alternative measures are necessary.

Yugoslavia 'must take steps to prevent brain drain'

Yugoslav planners must treat science and higher education funding as a factor even more crucial than natural resources in order to stop the brain drain, according to Dr Blazevic Sokic, a leading Belgrade economist.

Addressing a federal conference of the Socialist Alliance of Working People of Yugoslavia, he castigated decision makers' current attitudes to treat science and education as social expenditure and not as a vital constructive force.

Funding for science and education, he said, was now down to less than one per cent of the national income. But

planning and in particular lack of coordination between the universities, which have most of the trained personnel, and the research institutes outside the university structure, which got the most of the resources, led to considerable waste and duplication of effort.

The publication of research was considerably delayed since virtually no funds were available for non-commercial publishing, Dr Sokic said. Disruption of the processes of "self-management" in Yugoslavia's particular contribution to socialism, meant that academic appointments were often made on the basis of nepotism and the prevailing system of mediocrity and

inefficiency in the institution concerned. As a result, he said, Yugoslavia was now suffering a brain drain. Young scholars were drifting away from the universities, particularly on the lower rungs of the university ladder, and the more sophisticated willow of Belgrade, Zagreb or Ljubljana.

In the large cities, scholars drifted into more remunerative occupations, usually in the bureaucracy, he said. A changing and shifting posts abroad and those who failed to return to Yugoslavia, Sokic offered a number of practical

Finnish tax is brought to book

from Donald Fields

HELSINKI

As the deadline approaches for a British government decision on whether to extend 15 per cent VAT to publications, a grave book crisis is unfolding in a European country that has been applying such a tax since 1964.

The country is Finland, which arguably has the most active reading public in Western Europe, but too small a population to sustain large prints of all but the most popular titles. The "crisis" diagnosis has focused largely on belles lettres, but it might be applied with still greater force to non-fiction produced by academics.

Many publishers give the sales tax, now standing at 19.05 per cent, as the prime reason for their difficulties. "If it forces up the price of a book above the psychological 100-Finnmark (£13.40) level, it can be fatal," one observed. According to one estimate, 30 million copies of 8,200 titles were printed in Finland in 1983. The average of only 3,659 per title includes bestsellers and school textbooks, so that countless works fell below the break-even point of 2,000. This pattern reflects the extent to which publishers retain an altruistic streak, a sense of national duty in promoting literature and science.

On the "academic" side the outlook is uncompromisingly bleak despite financial support channelled into publishing by universities and scientific societies and scholarships provided for authors by foundations: exact sums cannot be quantified. Through con-

"The number of titles has actually been expanding despite the smallness of the market," said Mr O. Unto Lappi, managing director of the Finnish Publishers' Association. "Consequently, production costs and prices have gone up."

In all countries imposing value-added and purchase taxes, books are levied at less than half the rate applied to other articles. In Britain (so far), Ireland, Norway, Switzerland, Austria and New Zealand they are completely exempt. Finland, Sweden and Denmark are the only countries where exchequers fail to discriminate in favour of books.

Even though the tax rate is somewhat below the Swedish 23.4 per cent and the Danish 22 per cent, Finnish books seem to be the worst treated. Finnish government officials, however, would be loath to forfeit the £35-£40 million they obtain each year by taxing books and appear unprepared to scrap an anomaly that spares cheap kiosk literature and newspaper subscriptions from tax.

On the "academic" side the outlook is uncompromisingly bleak despite financial support channelled into publishing by universities and scientific societies and scholarships provided for authors by foundations: exact sums cannot be quantified. Through con-

ventional outlets, many titles are sold for beyond 1,000 copies and eventually disposed of at a knock-out price in late winter sales.

Prices have undoubtedly deteriorated the traditional book buying habit and after a steady rise from public libraries slightly decreased last year. Though some alternative publishers flicker, they are extremely risky business. Immediately the big two—Wsoy and Otava, which 70 per cent of the market—believe that some medium-sized publisher will fall by the wayside.

The Ministry of Education is investigating possible ways of subsidizing publishing, though the finance ministry is pouring a cold shower on the proposals. For many years, the Ministry of Education has been a model of a publisher's dream: a model of a publisher's dream: a model of a publisher's dream.

Rather than a reform that would enable bureaucrats to select what volumes merit support, the Ministry would like sales tax to be lifted. The unhappy experiences could be the Nigel Lawson some food for thought he decides if his budget can still the special treatment for books.



Pedigrees investigated

Libya has launched a research project in "forensic sociology". A team of historians, sociologists and anthropologists have been given the task of investigating the origin of families which give birth to "stray dogs"—people politically opposed to the regime of Colonel Gaddafi, who have taken refuge abroad.

The research team is supposed to investigate what turns such people into "stray dogs and slaves of the CIA, deserving contempt, bondage and filth" instead of living in Libya under what is officially called "freedom and people's authority".

It has not been announced what will be done with the result of the survey.

Cheats face exposure

The University of Toronto will soon publish the names of all students who cheat in exams and essays.

In a determined effort to curb academic dishonesty, the university has decided to toughen its academic code of behaviour. The changes will be implemented next autumn. The amendments have been approved in principle but must still be passed by the university's governing council.

Under the amended code, students who are caught cheating will face a tribunal hearing. If found guilty, they could be suspended or expelled from the university. Moreover, their names will be made public and the sanctions imposed against them will be recorded on their university transcripts.

In the case of expulsion, the sanction would be permanently noted; for those who are suspended, the record will generally be wiped clean after four years.

For the past nine years, the university has been shielding the names of those caught cheating.

Fees perk threatened

Moves to curtail a "perk" for university staff—tuition fees remission for their children—are being strongly resisted in Ireland.

At present, the children of all full-time permanent staff in universities get free tuition at college. Spouses of staff have half fee remission.

With fees hovering around IRE£1,000, the remission is a considerable perk for staff when their families are attending university.

Most academic staff are above the eligibility limits which qualify students for normal state grants and less than half of Irish university students get them anyway.

The government originally wanted to withdraw the fees remission concession from all staff immediately. But when this proposal ran into strong opposition a compromise proposal was worked out.

Under this, existing staff will retain the remission concession but new staff appointed from next October will not be entitled to it.

measures to relieve the situation, ranging from immediate injection of research funds to better housing and pay rises. Academics, particularly on the lower rungs of the university ladder, and the more sophisticated willow of Belgrade, Zagreb or Ljubljana.

Most important, he urged, was a major rethinking of public attitudes to science and learning. Restrictions on subscription which "reduced the wings of knowledge" should be lifted, and the teaching of education and research investment be lifted.

US to carry out science policy review

from William Norris

WASHINGTON

A comprehensive review of United States science policy, the first in 25 years, is to be carried out by the science and technology committee of the House of Representatives. It is expected to take two years and will touch on areas vital to university and college research.

Under investigation will be the existing federal policy of having a multiplicity of agencies funding scientific research, to find out whether this leads to waste and unnecessary duplication, and whether it ensures that all worthwhile subjects are explored.

The committee has also been urged by its task force on scientific policy to review accountability in science. The task force is worried by the "too much still miniature" problem of scientific fraud by a few individual scientists.

The current status and needs of research universities will come under scrutiny, in the light of recent questions that there is an urgent need for funds to construct new buildings and facilities. Thus far, however, there has been little hard data to support the claims.

In a 62-page report, which will form the agenda for the investigation, the task force makes sharp criticisms of the peer review system, in which a select group of scientists evaluates the quality of research proposals and ranks them for federal funding. This system, says the report, appears to be biased against radical, high-risk project proposals, and against younger investigators.

The study group also suggests looking at federal support of graduate education of scientists, doctors and engineers. Traditionally, students get a stipend to help defray educational expenses. Recently though, emphasis has turned to more indirect methods of support such as channelling funds through research grants, thus making it difficult to determine the number of students expected to benefit from funds.

The new course was established in the School for Independent Study and emphasized competence as well as independence. Each student charts their own course of study and signs a contract with the polytechnic for a particular programme of work.

The first term is spent planning their programme of study. The writing and agreeing of a statement of intent is seen as part and parcel of the teaching process and being able to solve problems competently.

For many who have had little formal post-16 education, it is not an easy task to draw up a precise statement in which the student has to lay out past life experience, assess present strengths and weaknesses, pinpoint academic and vocational intentions and plot a course of study identifying which of the institution's resources will be needed.

The student has to find a work tutor who will supervise the study either from the School of Independent Study or from elsewhere within the institution. Even the polytechnic's press relations officer is involved and is supervising a student, a successful promoter in his

After much debate Stanford University trustees have approved a site for the Reagan Presidential Library. The proposed 20-acre site lies in the foothills to the west of the campus.

An independent foundation to raise funds for the library is among the first steps and building will not start for at least two years.

The design will aim to fit into the Stanford hillside and to complement the Spanish-style campus.

Looking after the paying guests

Overall the number of overseas students in the UK may be falling, but they are assuming an unparalleled importance in the affairs of institutions.

There is anxiety in many quarters that the growing tendency to regard them as a source of revenue has been given greater authority by the failure of the University Grants Committee to regard them in any other light in its advice to ministers.

Committed to an internationalist perspective, the UK Council on Overseas Student Affairs could barely contain its irritation at this, and at suggestions that institutions were adopting the morality of the used car lot in their quest for fee-paying overseas students.

The council is pressing for a code of practice which will cover such issues as recruitment policy and the preferred way for overseas students to be handled.

Its executive secretary, Ms Gail Taylor, says: "We are not saying recruitment is per se wicked and evil. Policies which encourage the flow of students we would favour in principle, provided tactics are honest, institutions are honest in the sale of their wares and the client gets what she or he is promised."

"But if there is evidence that institutions are dropping academic standards in a way which cannot be in the interest of British higher education overseas, or of the students themselves, one has to question the ethics of recruitment."

Proposals for the code have had a general welcome, but the Department of Education and Science believes one should not be imposed on institutions and while Ms Taylor accepts that the colleges are best placed to devise the code, a lead has to come from the Government.

Without the code, problems will increase as students who pay more for their courses are more demanding and as the 'international economic and political situation grows ever more complex.

An escalating number of overseas students has laid its problems at the doors of UKCOSA's office above a bank in cosmopolitan Westbourne Grove.

Since 1981 the numbers approaching staff have trebled and the upward

David Jobbins looks at the campaign for a code of practice on overseas students

trend shows little sign of tailing off.

Casework—dealing with individual problems of immigration, finance and legal matters—occupies about half the staff's time. The rest is taken up with providing training and information services for the institutions and organizations which belong to the council, and formulating policy in response to Government and other official actions affecting overseas students.

The council was formed in 1968 out of a recognition that a national umbrella organization was needed to draw together the regional and institutional bodies already operating in the field.

Two separate issues led to its formation—the move in 1967 to differential fees for overseas students and the problems for West African students associated with the Biafran war. Many of the problems the organization tackles have had their roots in the difficulties of those West African students have subsequently been mirrored by successive victims of civil war, military coups and other events that interrupt the supply of funds or throw up other problems.

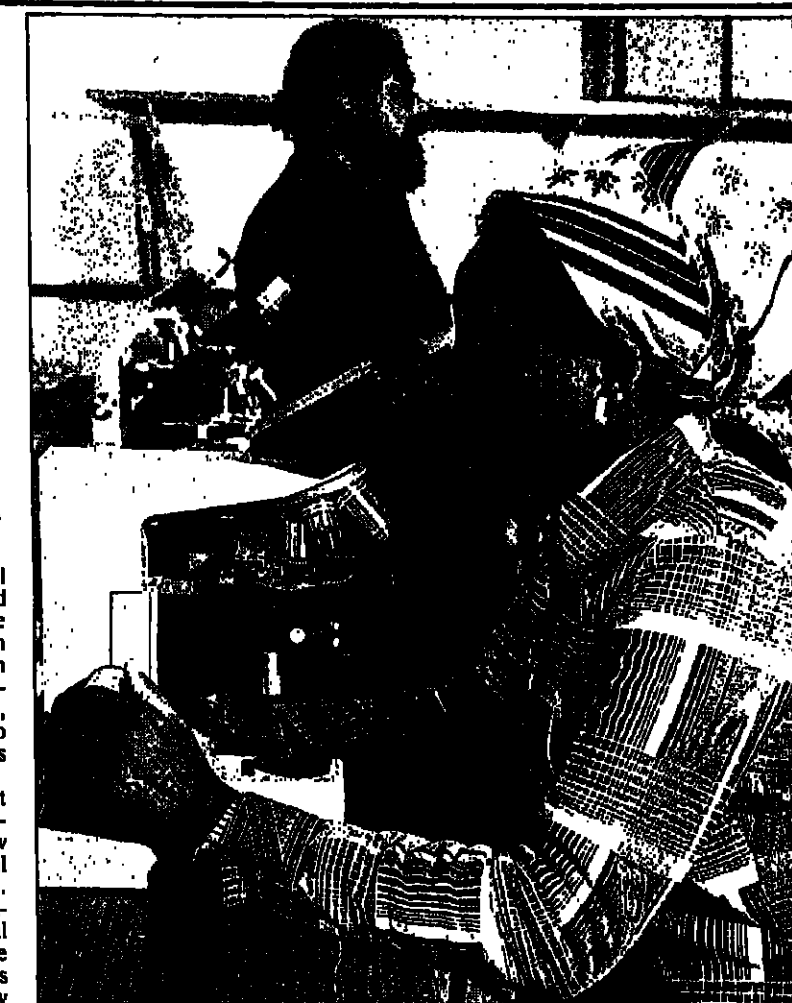
Among the groups aided over the past 16 years are Ugandans, Malaysians, Indonesians, Cypriots, Zimbabweans, Nigerians, Iranians, Ghanaians and most recently Sri Lankan Tamils.

The establishment was rapid—an inaugural meeting in July 1968 was followed by the appointment of the first permanent secretary, Mr William Beale, in August. Early initiatives concentrated on developing contacts with Government departments and the issue of hostel accommodation for overseas students.

Towards the end of 1968, UKCOSA moved to its first permanent home in Buckingham Palace Road, where it stayed until the present offices were occupied in May 1972.

The Government's announcement earlier this year of deficiency funding of up to £72,000 a year brought to an end a period of enforced constraint, and UKCOSA's staff is now being expanded to its level of two years ago.

Subscribing organizations and institutions are being asked to share a larger part of the financial burden, and a membership drive which as well as consolidating existing coverage will break new grounds by seeking to enrol law and advice centres is being launched. But the staff are anxious to ally fears that receipt of Government funding through the Department of Education and Science will in any way compromise UKCOSA's often critical



Under scrutiny: British responsibility towards overseas students

approach to official policies and attitudes. "It shows the Government is prepared to feed the dog that bites it," says deputy executive secretary Alison Barty.

What the period of financial stability offers is an opportunity to put into practice the established aim of training workers in the field, whether on the staff of institutions or working for student unions or other voluntary groups to deal with the casework problems that now place such a burden on the headquarters staff.

Returns for a recent quarter showing 250 letter inquiries, more than 600 more by telephone and 48 calls obscure the true workload involved in following up appropriate cases or suggesting alternative channels.

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Felicity Jones reports on the success of NELP's student-planned diploma of higher education

A diploma with a difference

If one educational development had to be chosen to reflect the "do your own thing" 1960s, it would probably be the growth of self-managed, individualized learning, particularly in the United States.

Envisioned upon by established academics and viewed by the validating bodies with a jaundiced eye, the idea was to hand back personal responsibility to the student to set his or her own goals for learning which had to be justified not just to the teacher but also to fellow students.

Just over ten years ago, North East London Polytechnic predicted the recommendations of the James Report on teacher training on two year qualifications and was the first to establish a student-planned diploma of higher education in this country.

The polytechnic serves an area which traditionally has a low uptake of higher education and draws upon a pool of heavily disadvantaged students. It was the natural home for such an experiment which required no formal qualifications from those mature students encouraged to jump on board.

The new course was established in the School for Independent Study and emphasized competence as well as independence. Each student charts their own course of study and signs a contract with the polytechnic for a particular programme of work.

The first term is spent planning their programme of study. The writing and agreeing of a statement of intent is seen as part and parcel of the teaching process and being able to solve problems competently.

For many who have had little formal post-16 education, it is not an easy task to draw up a precise statement in which the student has to lay out past life experience, assess present strengths and weaknesses, pinpoint academic and vocational intentions and plot a course of study identifying which of the institution's resources will be needed.

The student has to find a work tutor who will supervise the study either from the School of Independent Study or from elsewhere within the institution. Even the polytechnic's press relations officer is involved and is supervising a student, a successful promoter in his

own right, in a course he wanted to follow on public relations and fashion.

The diploma was first validated by the Council for National Academic Awards in 1974 since which its annual intake has increased to around 200. The success rate is about 60 per cent and half of those go on to do an extra year for the degree.

The degree course was first validated in 1976 and the current enrolment is around 100 full and part-time students based on a form of contract-learning. The honours degree student justifies a course of proposed study, based on his or her own interests and intentions, before a board which is responsible for seeing that it is legitimate.

Broadly, the polytechnic, through a school board and standing committee of the academic board, monitors the individual programmes while a validation board until recently chaired by Sir Toby Weaver, former permanent secretary, oversees the validation procedures.

The success of the independent studies programme has been documented and is now well recognized. In traditional terms the number of first class awards for degree graduates has steadily increased. Out of 56 enrolments in 1982, there were nine class 1 awards and 14 2:1 with only five fails, three of which resubmitted and later gained their degree.

But to sceptics even these high successes can be the excuse for criticism and last year the academic board took exception to the fact that so many firsts were awarded. The indignation was that the standard had to be low if so many students were getting firsts by such an unorthodox route.

But validation is rigorous with external examiners appointed by the CNAA as well as the polytechnic and drawn from a wide variety of specialisms. One chief examiner Professor Maurice Peston reported that the performance of the candidates in 1982/83 had been of "an exceptionally high standard" and the CNAA

appointee, Professor Donald MacRae, remarked that "in some cases the examining was far too severe".

The prejudice against non-traditional learning if anything swings the pendulum of quality control the other way towards stricter assessment.

Another sign of success has been the approval by the CNAA of a masters and postgraduate diploma by independent study. Many of these postgraduate students will most likely be using the course to develop certain personal and vocational aspects of their lives, but their projects may not be necessarily original in the conventional sense usually understood for higher research degrees.

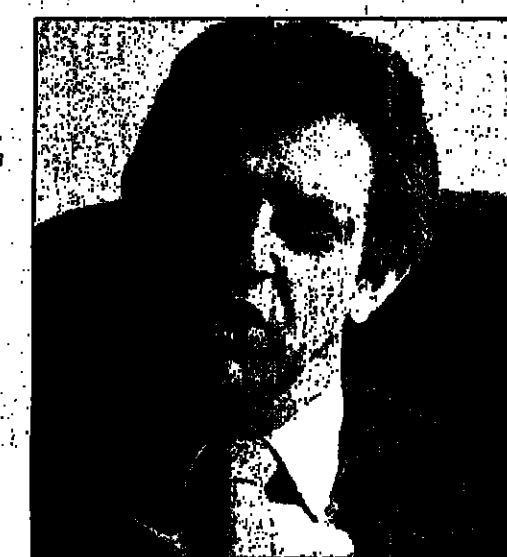
Dr Derek Robbins, course tutor, said about the new postgraduate courses: "They are midway between highly taught masters and purely original research." There are about 14 in the first cohort, but it is expected that the figure will settle around 30 students.

The polytechnic expect interest to be shown by the engineers in the masters. The independent studies mode of study makes it feasible for low numbers to do courses where it would be uneconomic in another setting.

The development of the postgraduate level is seen as a natural consequence of the growth of independent studies in NELP and as representing a final seal of approval from the CNAA. Internally, it will enable the polytechnic to meet one-off short term demand and to provide a greater range of options for postgraduate study.

In the wider context, independent studies are very useful financially to the polytechnic through recruiting students to specialist areas related to research and consultancy not normally supported by taught courses, raising underutilized class numbers and making more use of facilities like libraries and other learning resources.

Mr Peter Toyne, deputy director, has gone



Mr Peter Toyne: emphasizes savings

on record as saying that the books prove that independent studies is cheaper than traditional undergraduate provision although to some extent it does live off the backs of the mainstream work.

On its tenth anniversary the existence of an international newsletter for independent study edited from the school is proof that NELP is still a forerunner in this form of unorthodox learning although others, like Middlesex Polytechnic, with its new modular courses and BA/BSc in independent studies in the pipeline, are beginning to challenge its well-deserved lead in the field.

In the light of the National Advisory Body's continuing education report and advice to institutions, the independent studies programme provides invaluable experience for NELP to build upon. The academic board has set up a working group which is now looking at ways in which the polytechnic's structure and working practices can be adapted to enable more mature students to take advantage of higher education.

one adviser will always be on duty. "What this means is that the phone does not stop," says assistant executive secretary Andy Masheter.

Immigration problems—applications for asylum or exceptional leave to remain and dealing with Home Office refusals—remain a large part of the caseload. Financial matters—either straight hardship or legally-complicated interpretations of the Fees and Awards Regulations—are the other main area.

UKCOSA has no funds of its own to alleviate hardship but will refer students in financial difficulties to alternative sources.

As part of the recognition that British institutions have a responsibility to the overseas students they so actively recruit, UKCOSA sees one of its main aims in equipping staff to cope with the added demands of students from different cultures and countries.

Residential training weekends are organized for student union sabbatical and welfare officers and one-day seminars on particular issues are also much in demand. Information is also systematically circulated to members and UKCOSA is also developing coordinated sets of training materials.

A new consultancy service has been established to help institutions anxious to live up to their responsibilities. Already three have been carried out, two of them in universities—and ways of improving communications within the institutions recommended.

At national level, UKCOSA has built up a healthy relationship with Government departments, and was instrumental in the setting up of the Round Table on overseas students which brings together officials from all ministries which touch on the issues, representatives of the institutions and other organizations.

Three Round Tables have been held since the first in 1983 and much progress has been made towards one of UKCOSA's principal aims of getting away from the ad hoc nature of the response by different Government departments to recurrent crises affecting overseas students. An interim report was presented last summer by a working party which is now honing the proposals. A major flaw is that the Home Office remains unwilling to operate a contingency plan for groups of students, preferring to consider individual requests on their merits.

A fourth Round Table is due in the autumn. In the meantime, according to UKCOSA, there is no substitute for raising the expertise of advisers dealing with overseas students at college level.

A telephone service operates from 10 am to 4 pm every weekday, when

Value for money? Bennett to inquire

The new United States Secretary of Education, William J. Bennett, has pledged himself as an ally of the reform movement in the American education system. In an exclusive interview with our Washington correspondent, WILLIAM NORRIS, Dr Bennett (right) announced this week that he is planning a long-term inquiry into the value for money provided by colleges and universities, and outlined the philosophy he will be bringing to his new job.

Mr Secretary, what do you see as the federal role in education over the next four years?

Starting with reality, which is a cluster of federal laws and regulations which I do not see changing dramatically over the immediate future, I will respond by saying what I would like to see us focusing on.

Because this is one of those moments in American history where lots of things are under scrutiny, particularly reform in the suburban school and now perhaps higher education, I think it is all the more important for this department to be in a position to provide the American people with the best information we have about our system and how it is working. That is both large and small. Information on college graduates, on high school graduates, on what do they know? What do we have to pay for what they know? Are we getting our money's worth?

Then there are smaller questions. What kinds of schools work the best? What are effective schools? What are effective colleges? The role of federal government ought to be to provide the best kind of information, conduct the best kind of studies so that this information can be given to the American people and they can change things if they want to.

Of the federal government should be an ally of the reform rather than inhibit it. It seems to me to be the very healthy American tendency of self-renewal. Every 10 or 15 years we say: "Hey, we are not up to speed. Let's get things going."

We have got to keep this from being just a temporary excitement, but to keep it so that it will have longer term consequences.

Then, of course, our particular programmes, which the law says we will implement. Support for higher education, the student aid programme, the handicapped, bilingual education, office of civil rights, vocational education—in all those areas I want to take a close look at what we are doing, and see if we are doing both what we should be, and if we are doing this effectively.

You have talked about a new renaissance in American education. That's a pretty grand phrase. How do you propose to achieve that?

I don't propose to achieve it. I hope to get out of the way and let the American people achieve it. Lincoln said about America that public opinion is everything—public opinion is now focused on school and schools. So I think the American people can achieve these reforms themselves. We should be.



WORLDWIDE

their ally, and not either carping nor inhibiting their process.

There have been three highly critical reports on higher education in the last few months, one of which you wrote yourself. Now you are in your new position what can you do about that situation?

The Department of Education might want to take an even closer look at higher education. This department did issue the National Institute of Education Report, *Partners in Learning*, but I am thinking of a longer term and perhaps more comprehensive study about higher education value and cost. Again, to focus attention, to suggest ways of improvement. In the report I wrote, we analysed the problem and made a number of suggestions for improvement. I am not as confident in making suggestions for the improvement of higher education generally as I was for the humanities, because I don't know what I need to know yet.

Would you see legislation arising out of such a report?

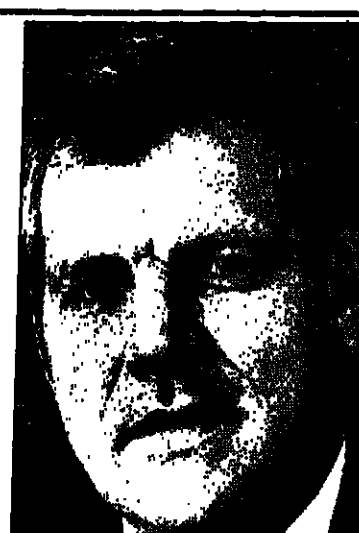
I doubt it. I think it is possible we might see some bills introduced to provide aid or assistance here or there. But I think mainly it is a matter of self-renewal, of institutional renewal, getting the word to the people who really have the authority to make the changes—the deans, the chancellors, the provosts, in the case of higher education—the governing boards.

You have made it very clear that you support the president's proposals for cutting student grants, and in the last few days you have looked like a man at bay. To what extent will you regard it as a personal defeat if Congress fails to pass those cuts?

I wouldn't regard it as a personal defeat. It is the way the American process works. I do think we have a good proposal. It goes without saying that this whole question of federal aid to education has to be brought under control. We are simply running this thing up to a degree which is intolerable.

Do you think American higher education is feather-bedded at the moment?

It may be. One of the interesting.



DOMINIQUE RIVOLLANT

questions is to what extent does the large amount of federal support drive up the cost of higher education. That's one thing I want to look at.

To a large extent the present controversy has centred on money, but that really what it is about, in your view?

No. The larger question is: what are we getting for our money? The quality question. American education institutions are typically American. It is like American restaurants, they range from the very good to the unmentionable.

I know you have been asked before if you regret your remarks about the diversities of autos and stereos, etc. So I won't ask you to defend that again...

But I will. I don't regret it. I regret that that was the only piece that many people saw, but what I said is true, for some students, not for all, not for most, but for some. I know it is true. The American public knows it is true. And most important, the students know it is true. As a matter of fact, it was students who told me this.

Would you describe yourself as an elitist?

Well, no, not generally. Given the connotation that has in this country, I think of myself more in that context as a populist. But I am an elitist when it comes to certain things, such as intellectual standards. But I am not an elitist when it comes to other things, like who should have access to higher education. I think everyone should have access to higher education. And I think we should give everyone the best we have to offer.

Would you like to see entry standards to colleges raised?

Yes. And along with that I think it would be in our interests to take more time with remediation for people at the lower grades, elementary and secondary, and let more people go to college after, if they need it, two or three years of remediation, rather than spending their college career in remediation or indeed spending their college career in what is, in effect, a remedial curriculum.

Your opponents are already saying that because of the grant cutting proposals the number of students is going to be slashed down. Does this mean that you really want to see an allimed down system, possibly with fewer graduates of a higher quality?

Well, it might mean that in some years, but it might not mean that overall. If you slow people up for two or three years in order to be sure they have the skills and abilities up to speed before they are admitted, they get there even faster.

This is like the question of whether there are too many colleges. Under the American system we have 32 per cent of our high school graduates going to college. I think in some sense that is wonderful thing, because this is part of the American dream. But, are we really getting higher education for that 32 per cent, or are we getting something else? But instead of saying "Well, let's cut down, let's have maybe 30 per cent go, let's stick to the initial aspiration. Let's have as many people go that want to go." But, let's be sure they are qualified to go, let's be sure they will get the most out of it. And let's be sure they are getting offered what they deserve.

The part-time university movement is growing rapidly in France. Craig Charney reports

Popular culture takes off

Courses in flower arranging, "mental dynamics", and setting up a business are hardly typical university fare. But the People's University of the Rhine in Mulhouse, which offers them, is hardly a typical university.

The institution is one of a growing number of part-time people's universities which have developed in France over the past decade. Their aim is to permit learning without the conventional academic restrictions of disciplines, diplomas, and exams.

The popular university movement is part of a much larger social movement, according to sociologist Genevieve Pujol of the National Institute for Popular Education. Yet the movement's very success is forcing the French to debate the functions and future of such informal institutions in a post-industrial society with a growing need for knowledge.

The people's universities were launched in France's early this century. More than 200 flourished before the first world war, but almost all of them died out during the interwar years. In the mid-1960s there were only four. The majority of the 30-odd now operating were set up over the past seven years, and others are still in gestation.

The outstanding characteristic of people's universities today is variety, in size, approach, and setting. The smallest have only a few score students, while Mulhouse, the largest, had 10,000 in 1983.

Many concentrate on subjects or self-improvement courses universities don't offer, including topics as varied as street singing, do-it-yourself home repairs, and reincarnation. Some touch on political questions, such as worker self-management, or the organization of social surveys by community groups. Others lean towards traditional academic subjects, with foreign languages and art by far the most frequent. Most offer at least a few courses of each type.

The popular universities are spread widely but unevenly across France. Several exist in Paris, with others in Marseilles and Nice, smaller towns such as Clermont-Ferrand and Chalon-sur-Marne, and even in a couple of rural areas. However, in large parts of the country none yet exists, including major centres like Bordeaux and Lyons.

Despite their differences, the new institutions have in common a rejection of many of the major features of French academic life: hierarchy, bureaucracy, and rigid admissions and exam requirements. According to educationist Renaud Sainsaulieu: "The people's universities base education on the mixing of people, by choosing to be as inexpensive as possible, not to select at entry, to place courses as close as possible to the lives of people, in basements of blocks of flats, in schools, and boutiques, and in fixing time-tables for evenings, daytimes and Saturdays to adapt themselves to every demand."

Rather than seeking outside expertise, adds a brochure published by the community universities of the 12th, 13th, and 14th arrondissements of Paris, such institutions try to tap grassroots resources.

The community universities went to mobilize the skills often unused or badly used, and whose richness on the scale of a neighbourhood often remains unsuspected.

A fairly typical example might be the People's University of Lower Normandy in Caen, created in mid-1983. Its 15 offerings range from languages, consumer law, and the history of scientific thought, to photography, fiction of local seashells.

comes from local government. Dominique Rivollant, one of the organisers of the Caen university said, "The popular university form is a sort of exchange. There are people who want to add to their knowledge, and others who want to share it."

"At the origin of the people's universities one often finds activists from May 1968 who are looking for a more realistic channel for their commitment today," reports Dr Pujol, who has published two studies of the popular universities.

However, even the establishment of the new universities belies generalization. Thus, the Peasant University of the Centre (West) was set up by the University of Paris, while the People's University of the Rhine is the brainchild of an executive who decided to promote "better living" courses rather than manufactured goods.

This diversity of origins corresponds to a diversity of demands. Jean-Louis Hoffet, director of the People's University of the Rhine, highlights three missions which such institutions seek to accomplish: to satisfy the "right to the useless", the "right to knowledge", and the "right to transmit".

The first of these "rights" refers to the need to spend free time in ways which are worthwhile but not necessarily economically profitable. The second deals with the thirst for learning in a society ever more dependent on technology and information which the education system often fails to satisfy. (Hoffet notes that 30 per cent of his university's students did not complete secondary school.) The last refers to the desire—shared even by some professional teachers—to offer knowledge freely across disciplinary lines and without official curricula.

Some educationists, such as M. Sainsaulieu, suggest that the growth of people's universities could help satisfy the need for new means of continuing education. He says: "The number of



DOMINIQUE RIVOLLANT: "It's an exchange of knowledge."

people who come and go and return to university keeps on increasing. Is this not the beginning of what one could consider the permanent university of the future, accessible to everyone at their lives? It is in such a context that the contemporary popular university movement can offer some elements of an answer."

However, there are tensions between the objective of reaching those traditionally excluded from higher education and that of promoting individual self-fulfilment. As Louis Pujol, director of the People's University of the North-Franchise-Comté, has pointed out, the former requires courses oriented towards the needs of disadvantaged groups, while the latter often implies tailoring offerings to the fancies of middle-class individuals at the expense of a broader social project.

A number of educators have expressed concern that the majority of students served by the popular universities come from relatively privileged strata. As Dr Pujol put it: "The public of the people's universities is far from being popular, even if they bring together a public which has a relatively weak school record on average."

These dilemmas may become more acute in the future, when a key question facing the movement will be institutionalization. Some participants in the debate advocate following the West German model—a national network of 850 "people's high schools", with state funding, standardized instruction and degree certificates. Others, however, fear that copying this system would sacrifice the strengths of the French movement: its informality, diversity, and independence based on a large measure of self-funding.

Higher education is a small world in Wales. There are only 24 local authority institutions running any advanced courses and almost 90 per cent of the places are concentrated in five of them. Everyone knows everyone else. The director of the polytechnic has used for a rise of a third in total student numbers, assuming level funding, although the polytechnic had been rather more realistic in its demands. Indeed, without the polytechnic, the aggregate increase requested would have reached 45 per cent.

By the time the secretariat's proposals reached the WAB board, the increase was down to 18 per cent, which made a total of 14,005 students. But the 20-strong board was in no doubt that such a total would put unwarranted pressure on funding levels, especially with the increase in student numbers for 1983/84, cast doubt on the ability of some colleges to deliver the students they were asking for.

The board consequently decided to cut 1,000 places off the total, much to the relief of the polytechnic in particular, where teaching space is at a premium and funding levels already fall well behind the English equivalent. But that turned out to be unacceptable to the local authority membership on the committee, which was more concerned with widening access to higher education than with units of resource. Some authorities were able to be more flexible on funding levels, in any case, since they are likely to continue "topping up" pool allocations.

The 1,000 places were reinstated and the polytechnic, which receives no topping-up, was allocated an additional 400 students. The WAB's advice was duly accepted by Mr Nicholas Edwards, Secretary of State for Wales, and has been announced in Parliament.

Dr John Davies, director of the polytechnic, wrote to Mr Edwards protesting about the polytechnic's treatment under the plan but found his

Small but not beautiful

letter referred straight back to the WAB. The contents were discussed at a meeting of the WAB chairman's study group on Monday and will go on to the board and committee in turn, but there is little or no hope of a change of heart which would affect the 1985/86 budget.

Should some of the colleges and institutes not meet their targets (as seems more than likely with two institutes asked to expand by more than 10 per cent and one, the North East Wales Institute expected to grow by 23 per cent), the polytechnic can hope for some form of rescue in the following year. Dr Bryan Powell, WAB's secretary, stresses that nothing in the first plan is immovable in subsequent years and both he and Professor Robert Steel, chairman of the board, are sympathetic to the polytechnic's plight.

However, that is no immediate consolation for Dr Davies and his colleagues, who have begun a review of courses to see how provision can be rearranged to accommodate the WAB's wishes. Teaching accommodation is now so cramped that an additional 400 students could not be taken without risking trouble with the validators. The obvious solution would be to cut back on overseas and privately-sponsored students, who happen to number about 400, but that would remove a vital source of funds as well as altering the character of the polytechnic.

Dr Davies says: "We are already 20 per cent behind the average unit of resource in the other polytechnics and we only cope as well as we do because such a high proportion of our money goes on academic provision. Our social and recreational facilities could be much better."

If the polytechnic was receiving

topping-up on the scale enjoyed by some colleges, which is thought to put the actual unit of resource up to more than £4,000 per student in one college, there would be no problem. But its maintaining authority, Mid Glamorgan, is the poorest in Wales and the money will have to be found elsewhere.

"I should make it clear that this is a matter of concern, not crisis," Dr Davies adds. "But the whole system adopted by the WAB has not achieved its objectives of promoting science and technology. A simple head-count of students would have given us more money than we will receive under the weighted system and our unit of resource will be lower than half the other Welsh institutions."

The differences are marginal, but the point is well made when the polytechnic's high-tech bias is taken into account. More than 700 students are in the heavily-computerized mathematics and computing programmes in the polytechnic's work.

This is precisely the kind of development the WAB is committed to encouraging. It gave top priority to the maths and computing, and electrical and electronic engineering programmes in the planning exercise, but also agreed to protect part-time and sub-degree work, which is not one of the polytechnic's main concerns.

Dr Powell, who with one assistant represents the entire secretariat of the national body, stresses that help had to be offered to the part-time courses run by colleges serving those who could not reach the main centres of higher education. Crosskeys College, at one extreme, has only four full-time equivalent places on its one advanced course, but is considered a valuable local resource.

John O'Leary examines the effects of the Wales Advisory Body's first national plan

"It was the committee's wish to develop public sector higher education on an all-Wales basis and it was conscious of different needs in different parts of Wales," he says. "The public sector has been very much the Cinderella name in higher education and we have consistently asked for more money as well as more places."

The WAB itself is run on a shoestring. Not only are there only two administrators, but they have to rely on the Welsh Joint Education Committee (the equivalent of the Council of Local Education Authorities) for clerical support. A consultative letter was being issued this week by the Welsh Office with the intention of making the body permanent, like its English counterpart.

The polytechnic's submission will be interesting, for it is clear that it would be substantially better off under the National Advisory Body. Politically, that is not an option and neither is radical change likely in the structure of the WAB. Once having accepted every local authority on to the committee, it would not be easy to alter the composition.

The polytechnic can only hope that the inequity of the 1985/86 distribution results in a new funding system, but with funding levels for the whole of Wales considerably behind those operating in England, that will not be an easy task for a body representing so many different interests.

Peter Aspdon reports from the Royal Veterinary College in London on a comparative approach to human and animal medicine

Taking short cuts from four legs to two legs

Human and animal medicine have long been regarded in many quarters as identical twins separated from birth—unquestionably related, never in contact but refusing to lose the glimmer of hope for a chance of reconciliation.

That reconciliation can take one of many forms; a small breakthrough in one field which paves the way for a far greater development in the other, or, less agreeably, the image of a strangled dog forced to puff on a cigarette. But generally, the two disciplines are kept apart, with separate facilities, training and qualifications.

It is, to a certain extent, an inevitable separation. But the belief is growing that to treat humans as just one species in the animal spectrum, to study the interface between human and animal medicine, can yield more impressive and significant results.

It is an approach which does not patronize animals, nor tramples all over their rights, but recognizes the help which the two branches can give each other in a variety of fields.

Mr Tommy Thomsett, a dermatologist at London's Royal Veterinary College, is one who sees his role as providing a comparative approach to human and animal problems. He deals local at issues. There is also the very challenging task of growing diseased cells in tissue culture.

Significantly, the funding for Dr Bedford's work in retinal atrophy in dogs comes from the Retinitis Pigmentosa Society—a medical group dedicated to combating the human disease. It doesn't escape the attention of those involved in animal research, of course, that there are many outside sources of funding which encourage work on animal/human problems.

are similar in humans and animals provides more potential for interdisciplinary cooperation. Dr Peter Bedford, an eye specialist at the college, is currently looking at two particular areas, both of which have implications for human medicine. Dogs suffer from a progressive blindness caused by central progressive retinal atrophy, which has a close counterpart in humans, retinitis pigmentosa, while glaucoma—an extremely painful condition—is common to both.

"The treatment of these in man has had varying degrees of success, but there are some very clear advantages in looking at animals," said Dr Bedford. "For a start, they have a shorter lifespan, which means a much quicker study of the disease process."

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Monitoring equine anaesthesia at the Royal Veterinary College

considerable benefits on the study of osteoporosis and total hip replacement."

Professor David Lodge, professor of veterinary neuroscience, also uses the advantages of research on animals to illuminate human conditions. By looking at the effects of drugs such as Ketamine and Phencyclidine on the brain, much has been learnt about the causes of schizophrenia and epilepsy.

"We are able to look at slices of the brain in great detail, in vitro, which can give us a clear idea on how drugs block particular transmitter systems in the brain. We would not be able to do such detailed work on humans, although there is obviously no cruelty involved. It just goes rather ahead of the ethics of human experimentation."

Surgery on animals is perhaps the closest example of how similarities with humans facilitates close cooperation. The metal pins and brackets which currently hold Barry Sheene's legs together, for example, are based on prototypes first used in dogs and cats.

Mr Gary Clayton Jones, an animal surgeon, said: "We are constantly encouraged to take a fairly aggressive approach towards surgery, and try things which have a good chance of success, but perhaps wouldn't be given a chance on humans. Consequently, many of the techniques are followed in

human medicine."

"The principle of treating animals for their own sake is paramount, however—and it is a principle which has caught the public imagination. Attitudes have changed tremendously over the last few years," said Professor Leslie Vaughan, head of surgery.

"Many more people have pedigree dogs now—if there is something wrong with them, they want something done, whereas they might in the past have just shot it and got another."

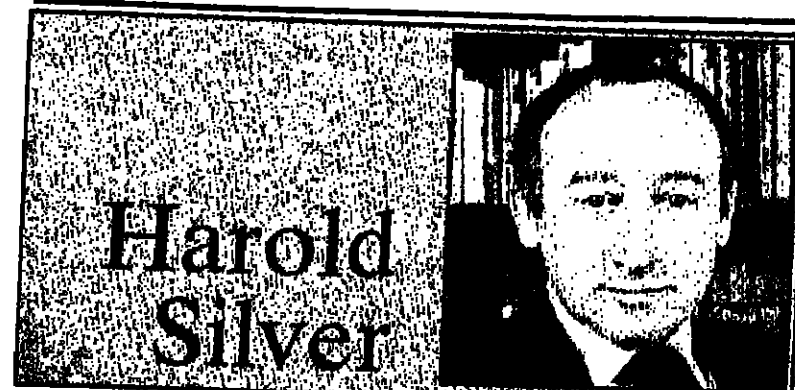
"I feel man has softened towards animal welfare, which is rather nice. It gives us much better opportunities to do things. If people are just going to put animals down, there's really not much point in our profession at all. The emphasis now is on saving life, which is greatly encouraging."

Inevitably, the changing attitudes and increasing sophistication of techniques puts an ever-growing strain on resources. "We have had our share of cuts, just like everyone else," said Professor Vaughan. "But it is so frustrating for this to happen at a time when we know we are getting better than ever, and developing lots of new ideas."

"In animal medicine, no less than in human medicine, people who come to a teaching hospital expect the best, and that is becoming more and more difficult."

"Medicine is one subject, and we must try to develop research fully, free of the influences of company policy. Students constantly ask me if I'm doing medical or veterinary work, and I just ask them 'What is the difference?'

In September
The Times Higher Education Supplement
published a 4-page analysis of the joint statement from the University Grants Committee and the National Advisory Body regarding the basis for considering the present and future role of higher education in our society.
Copies are available at 30p each.
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Harold Silver Americans gain while the British retreat

At my last Washington conference 1,006 of us sat down to dinner. This time there were 900 of us (one British) gathered to discuss the report of a project on the meaning and purpose of undergraduate degrees. The report, published two weeks ago by the Association of American Colleges (and summarized in last week's *THES*) has the title *Integrity in the College Curriculum*. The report and the conference were basically asking what, in the context of a meaningful undergraduate learning experience, constitutes quality - and how to improve it?

The AAC had also just created a new Council for Liberal Learning, which met during the conference to discuss its plans to demonstrate the value of a liberal higher education, including in the world of work, and to build new coalitions in support of liberal education. Two themes. Liberal education for my column today. Quality next. Watch this space!

The buzz is worth listening to. Reagan appoints as Secretary of Education William Bennett, who, whatever else, has an old-fashioned view of the centrality of the humanities. This is a view he has been fostering from his position at the National Endowment for the Humanities, and which he enshrined in 1984 in a report entitled *To Reclaim the Legacy*, subtitled "a report on the humanities in higher education", and embodying commitment to a core of humanities and cultural studies for all students. In 1982 a National Commission on Higher Education Issues underlined prevailing anxieties about college and university business and professional leaders with an understanding of foreign languages and cultures, and of the roots of our own civilization and culture, and of the powers and limitations of science and technology.

A 1984 report from a National Institute of Education study group, *Involvement in Learning*, summarized the recommendations as being to a large extent to reverse the trends of specialization, narrowness, fragmentation and limited knowledge, an excessively vocational orientation, and "to restore liberal education to its central role in undergraduate education". As Howard Bowen wrote in 1982, a liberal education counter-revolution was taking place, and it was time for college and university educators, system-wide, to assert their values, which should have priority over those that flow from government and the market.

Leaving aside the difficult question of priorities, Bowen's "counter-revolution" becomes more visible. It was clear from the array of speakers and 899 other participants that something is happening. Renewed interest is apparent (it may be new only in the policy circles and on campuses in rethinking the curriculum of higher education, its shape and purpose. This may all point to conservative nostalgia or radical, future-oriented pragmatism, or some mix of the two. What it does not point to is any consensus about narrowing arts and humanities curricula and provision.

British campuses and curricula are not the same. There are, nevertheless, parallel confusions and anxieties about purpose. The latter have been submerged beneath accumulations of panic and dismay. This may be the time to follow American examples, not in the details of their concerns, but in vigorous self-questioning. Governments and their departments have failed, but

these should not be allowed to include an assumption that they understand or should define everyone's best interests. When countervailing influences have been weakened to the degree that they have, there are useful lessons in the way American pressures and coalitions take shape. So where is liberal education? How relevant is the American discussion and the processes at work? The AAC conference focused heavily on overspecialization, departmental imperialism, the design of courses to match staff research interests rather than student needs, the pursuit of bodies of information rather than critical inquiry, and the difficulties of student learning in over-busy courses.

As one physics student was reported to have commented, it was like trying to get a drink of water from a fire hose. The ability of staff and students to cross cultures seemed no easier in the 1980s than it had seemed to Snow in 1959. The concern, against that sustained critique, was with raising quality and generating new energies. How, asked Ernest Boyer - one of my fellow columnists and member of the AAC working group - can the "tyranny of curriculum" be relaxed, while better integrating liberal education and its historical mission to be useful, which indeed it always has been? Did not productive work, in fact, need to be better informed by liberal values?

Those are not new questions. They have surfaced with great clarity and vigour at important points in industrial and technological development. In the early decades of this century Whitehead and Dewey and others grappled with the relationship of educational ideas and practices, and the changing technologies of production. They grappled with the impossibility of rigid categories, as Whitehead in his famous *Education in the Modern World* said: "there can be no adequate technical education which is not liberal, and no liberal education which is not technical".

This is no time to over-simplify that complex equation - but there is much over-simplification. A liberal education divorced from contemporary realities is no liberal education. Technology divorced from values, in a society which does not understand technology, is no education at all. The American issues of educational content and purpose are, in different clothing - British issues.

In the Britain of the late 1980s the higher education issues are several-fold. How does vocational higher education best generate the qualities traditionally associated with critical humanistic study? How do traditionally "humanities" areas of study dovetail with the scientific and technological underpinning of modern society? How can higher education prevent government from attempting to shape the system and its institutions solely in the government's image of what the labour market and modern society appear, today, to need? How can higher education respond to narrow, short-term definitions, constraints and emphases which governments have been learning how to impose in the name of immediate economic change?

American higher education appears to be learning how to confront such issues. The British need to learn perhaps with greater urgency. A British report might not be entitled *Integrity in the College Curriculum*, but it might well be subtitled "redefining the meaning and purpose" of undergraduate degrees. Though there are defenses to be manned, there are futures to be faced, dialogue to be had - about resources, but also about the purposes, and intentions of higher education, its institutions and its people.

If the polytechnics are misunderstood or underrated they have only themselves to blame. Some of their chairmen and directors are concerned about the public image of the polytechnics and are due to meet to decide what to do about it. But they are unlikely to make progress with this because they have no basis of agreement about the image they want to project. They do not know what the polytechnics are, what they are about or where they are going.

Most obviously they are unlikely to agree about the identity of the polytechnics when some of their leaders are anxious to lose it, whatever it is. Rarely have the representatives of a group of major institutions displayed such a lack of self-confidence. Things have come to a pretty pass when the leading spokesman for the polytechnics is the head of an Oxford college. Paternalism could hardly go further.

More opportunism and utilitarianism, however competently pursued, are not enough, even in these days when idealism is so unfashionable. The polytechnics are respected for their technical competence, perhaps more than they realize. But this can avail them little if they cherish no ideals higher than materialism and self-interest. The polytechnics have no political allies because they have no politics beyond themselves. They lack even the semblance or the pretence of nobility and in consequence seem to lack humanity.

To expect institutions or a group of institutions to behave altruistically at all times is to be foolishly naïve. But educationists enjoy privileges in society on the understanding that they are bound by and accept some limitations of principle. Headteachers, polytechnic directors and vice chancellors enjoy exceptional powers and privileges but for this they have a price to pay. Sometimes, if they are not to abuse that privilege, they have to be seen to be acting against their own institutional interests in pursuit of a higher ideal.

There are major issues about who should get higher education, what form it should take, where it should be taken and what it should cost. When academics respond to the challenge of these questions with nothing more than transparent self-interest they not only betray a trust, they raise doubt about their competence as academics. An essential ingredient of academic integrity is objectivity and the real test of objectivity is that of personal interest.

This presents a challenge to which leaders of the whole academic community have responded unimpressively. One feels for example that interest in mature students is growing mainly in consequence of the expected decline in young students rather than any genuine interest in mature students as such. It cheapened the whole of British education when the universities responded to the recent cuts with more concern for academic tenure and the pockets of their staff than for the well-being of their students and prospective students. The response of the polytechnics has been by contrast much to their credit.

But the question of student numbers in the longer term has embarrassed and exposed the polytechnics. They have supported a sufficiently expansionist policy to protect the polytechnics from contraction but not sufficiently to require an expansion of the colleges of further education or the creation of more polytechnics. They give the impression that if the Secretary of State announced the intention to grant university charters to polytechnics they would respond like gladiators, tearing each other apart to gain favour from Caesar, rather than standing together on any principle or any commitment of policy. They are vulnerable to arbitrary action by government because they have not earned, they have not even sought, national authority.

The polytechnics lay themselves open for misrepresentation, caricature and ridicule. To be mere imitators of universities would be to have no identity of their own. To be more than that, to be a genuine force, they must have a purpose, a mission, a vision. A disciple of Leavis has recently made the name of a novelist by lampooning the polytechnic that employed him, *True spirit*, he now proceeds to make his fortune as a pop artist. Both his Cambridge college and his polytechnic deserve him.

It has become fashionable among political commentators of the "qual-

Polytechnics have only themselves to blame if they have a bad public image, says Eric Robinson



The response of polytechnics to students' needs has been much to their credit

More pride and less prejudice

"ny" newspapers to refer to sinister polytechnic influences in politics, particularly within the Labour party. Some have even talked of a "polytechnic" revolution. It is a fantasy developed in El Vingo by Oxfordshire men who have been shocked to notice that 20 years ago the National Union of Students executive replaced the Oxford Union as the cradle of British politicians.

Redbrick is asserting itself in parliament and to an Oxford man there is no distinction between a polytechnic and a civic university. The essential concept is that the polytechnics are pseudo intellectual outsiders who are subservient to the dominant class. It is interesting that this nonsense has been so easy to introduce into political gossip and that it has gone unchallenged by the polytechnics.

The polytechnics' diffidence and lack of positive public stance is yet one more symptom of the oppressive effectiveness of the snobbery of the British class system. The strength of the polytechnics, and the evidence of their substance, is the very high regard in which they are held by so many of their students and their former students; that this is recognized by a growing number of schools and employers; that a growing body of institutions and companies know that the polytechnic is a place to go for a quick and effective response to a research or training initiative.

Instead of pretending to be what they are not and should not wish to be, the polytechnics should take pride in what they are and in what they have the potential to become. In pioneering the cause of mass higher education they could locate this country only one century behind the United States. And UCLA, does it matter? Even by the standards of the present government this country needs at least to double the participation rate in higher education and to persuade employers and unions that we need a massive investment in education and training in every

city, town and village. This is a noble cause if one is needed, as it surely is, to make the polytechnic enterprise worthwhile.

The polytechnics could develop from their existing base to form a system of mass higher education. This would offer a service to all who could benefit rather than select the "best" students. It would strive to demystify higher learning rather than encourage the fiction that only a special minority could pursue it. It would provide services as and where and when they were most convenient for its clients rather than invite applicants with able to conform to its prescriptions. It would offer to people what they wanted rather than what the system wanted to offer them.

The tradition whence the polytechnics come provides the authentic roots for such a development. All that is lacking is the confidence and authority to throw off the labels of "third rate" or "second best" that attach to the system essentially because of its social class antecedents. The greatest obstacle to the development of the polytechnics is embedded deeply in the minds of the polytechnic staff by their university teachers - the conviction that only a minority of people are of real quality and that this quality is protected by insulation from the real world and the mob that inhabits it; in other words a lack of belief in democracy.

In calling for a democratic theme for the development of the polytechnics I am not thinking of academic syndicalism or student power but of the more fundamental ideas of accountability to the public and of the higher education community as an integral part of the community at large. There may be other concepts of polytechnic. By all means let us examine them, but let us not waste time on details of procedure until we have given more time and thought to the questions. Until we muster the courage for that, we need no the grandest municipal technical school.

Government publications rarely contain definitions of efficiency and effectiveness; their meanings are assumed. Efficiency is equated with "value for money", "elimination of waste", "simplification of tasks", "cost-consciousness and cost-cutting", "better methods of organization". Often the idea of economy is linked with efficiency and effectiveness is omitted from the equation entirely.

However, both were defined clearly in a report from the House of Commons Treasury and Civil Service Committee in 1982: "effectiveness: the definition of objectives, the measurement of progress towards achieving these objectives and the consideration of alternative means of achieving objectives"; "efficiency: given the objectives and the means chosen to pursue the objectives, the minimizing of inputs to the programme in relation to the outputs from it".

Effectiveness, therefore, concerns policy goals, or outputs and the extent to which they are attained, assessed where possible by measurement. Efficiency focuses on an input/output relationship aimed at minimizing inputs (such as staff) while maintaining the same level of outputs or even increasing them.

Mrs Thatcher's government took office in 1979 with the aim of improving efficiency and effectiveness in the Civil Service. Policy was twofold: "to set a financial framework (manpower and money) to create a general incentive towards economy and efficiency. This is being achieved through strict limits on the amount of money available ('cash limits') and on the total number of civil servants ('manpower targets'). The government has set a target for the size of the Civil Service of 630,000 by April 1984 - over 100,000 fewer than when it came to office. It is seeking to achieve this in a balanced way and as far as possible by natural wastage at all levels". (In fact, the government overshot this target, reducing the Service by 623,972 in the given period and has set a new target of 592,723 by April 1, 1988, a further cut of 6 per cent.)

Second: "to ensure that this general incentive is translated into specific action to get better value for money. This demands a continuing process of critical examination of activities, functions and policies, with particular regard to cost and need". Its own political beliefs, and the need for economic recovery, led the Conservative government to link efficiency with cash limits and reductions in Civil Service manpower. A related policy is "privatization", or contracting out, whereby work is transferred from the Civil Service to the private sector. The government favours drawing lessons from relevant business experience. Though Britain is not alone at this time in pursuing efficiency and effectiveness, the United States, Canada and Sweden have greater formal institutionalized arrangements for such aims than either Britain or France.

In May 1979, the Prime Minister appointed on a part-time (and unpaid) basis Lord Rayner, a joint managing director of Marks and Spencer, to advise her on efficiency and effectiveness in the Civil Service. The remainder of his tenure until 1983, when he was succeeded by Sir Robin Ibbes, executive director of ICI and former head of the Central Policy Review Staff.

Both in turn have been based in the Cabinet Office, having direct access to the Prime Minister and have been supported by a small unit of officials. Rayner's view was that the business of government is too complex and large for efficiency to be appraised from afar; it is necessary to "get down to the point where work is done".

Although initially uncertain, by late 1981 Mrs Thatcher favoured disbanding the Civil Service Department. Many of CSD's tasks, including promoting managerial efficiency in the service, were transferred to a new Management and Personnel Office within the Cabinet Office. Thus, the Rayner unit already in the Cabinet Office was coordinated with wider aspects of Civil Service efficiency. The Treasury, then Secretary of State for the Environment, devised an information system which would reveal and cost the totality of the activity of his departments and not merely those activities presented by manifesto commitment or raised as a result of day to day activities. MINIS provides the Secretary of State, his ministerial colleagues and senior managers with information to enable them to review in detail, the department's activities and manpower needs. The DoE reduced its manpower

with the Prime Minister's authority, as Minister for the Civil Service. Its most crucial work towards efficiency is the Financial Management Initiative run jointly with the Treasury and launched by Mrs Thatcher in May 1982. The *Joint Financial Initiative* meets Rayner's advice on changing the managerial culture of the service. It is aimed at promoting in each department an organization and systems in which managers at all levels have a clear view of their objectives with the means to assess and measure outputs or performance; well defined responsibility for making the best use of resources; the information, the training and the access to expert advice needed to exercise such responsibility.

Besides the Financial Management Initiative, the MPO contributes to the pursuit of efficiency by helping departments conduct Rayner scrutinies and disseminating lessons of wider significance through, for example, the Civil Service College. The MPO also promotes management services and the use of computers and other machinery; encourages improved industrial relations; and, within its responsibility for training, gives priority to training in accounting, financial management and audit. Despite this priority, overall money for formal training has been reduced.

The Treasury's main concern with efficiency and effectiveness is the development of systems of financial planning and control. Financial control has been achieved traditionally through its public expenditure divisions which require a justification for departmental expenditure and exert a downward pressure on the total cost of programmes. The Public Expenditure Survey Committee system and cash limits were introduced in 1976 when public expenditure was getting out of control.

The Treasury sees the key to strengthening the financial framework of Whitehall departments as being the wider development of management accounting systems in more departments than existed previously, based on adequate data which can be integrated with the present financial framework of PESC and the Estimates. The Department of the Environment has worked out a management accounting system (called "MAXIS") to suit its own needs, and the Treasury considers that it has principles for broader application in the service. MAXIS complements "MINIS" which is a management information system introduced in the DoE in spring 1983 in conjunction with Rayner. Michael Heseltine, then Secretary of State for the Environment, devised an information system which would reveal and cost the totality of the activity of his departments and not merely those activities presented by manifesto commitment or raised as a result of day to day activities. MINIS provides the Secretary of State, his ministerial colleagues and senior managers with information to enable them to review in detail, the department's activities and manpower needs. The DoE reduced its manpower



The politics of efficiency

the department caused Rayner to support moves in the service to charge individual departments for central services previously supplied free by HMSO, the Civil Service College and others. Departments had been developing some of these management practices, such as management information systems, to varying degrees of sophistication before Rayner's extension. These "lasting reforms" aimed at strengthening departmental management involve work on people to produce changes in the managerial culture of the service (away from the "administration" tradition of concentrating on policy formation as the prime role of senior civil servants to "manage" the work of the service). This demands a continuing process of critical examination of activities, functions and policies, with particular regard to cost and need".

The particular exercise (known as 'Rayner scrutinies') is conducted by the department for the department. Subjects for scrutiny have been chosen by departments in consultation with Rayner, and the examining officers who carry them out come from within the department. Scrutinies have a 90-day limit for completion and reports are presented to the departmental minister who decides what action is to be taken on the recommendations. Examples would include the Home Office scrutiny of the Forensic Service; the Ministry of Defence scrutiny of defence sales; and the Department of Transport scrutiny of winter maintenance of motorways and trunk roads. A number have provided lessons from relevant business experience. Though Britain is not alone at this time in pursuing efficiency and effectiveness, the United States, Canada and Sweden have greater formal institutionalized arrangements for such aims than either Britain or France.

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One of the great strengths of a properly organized welfare state is its capacity to learn from the experience of its people and make constructive use of the lesson. Randomized control trials of new treatments which help to ensure that new drugs and medical procedures are not introduced unless they are reasonably effective are standard practice in Britain's National Health Service but much more difficult to organize in a free market for health care.

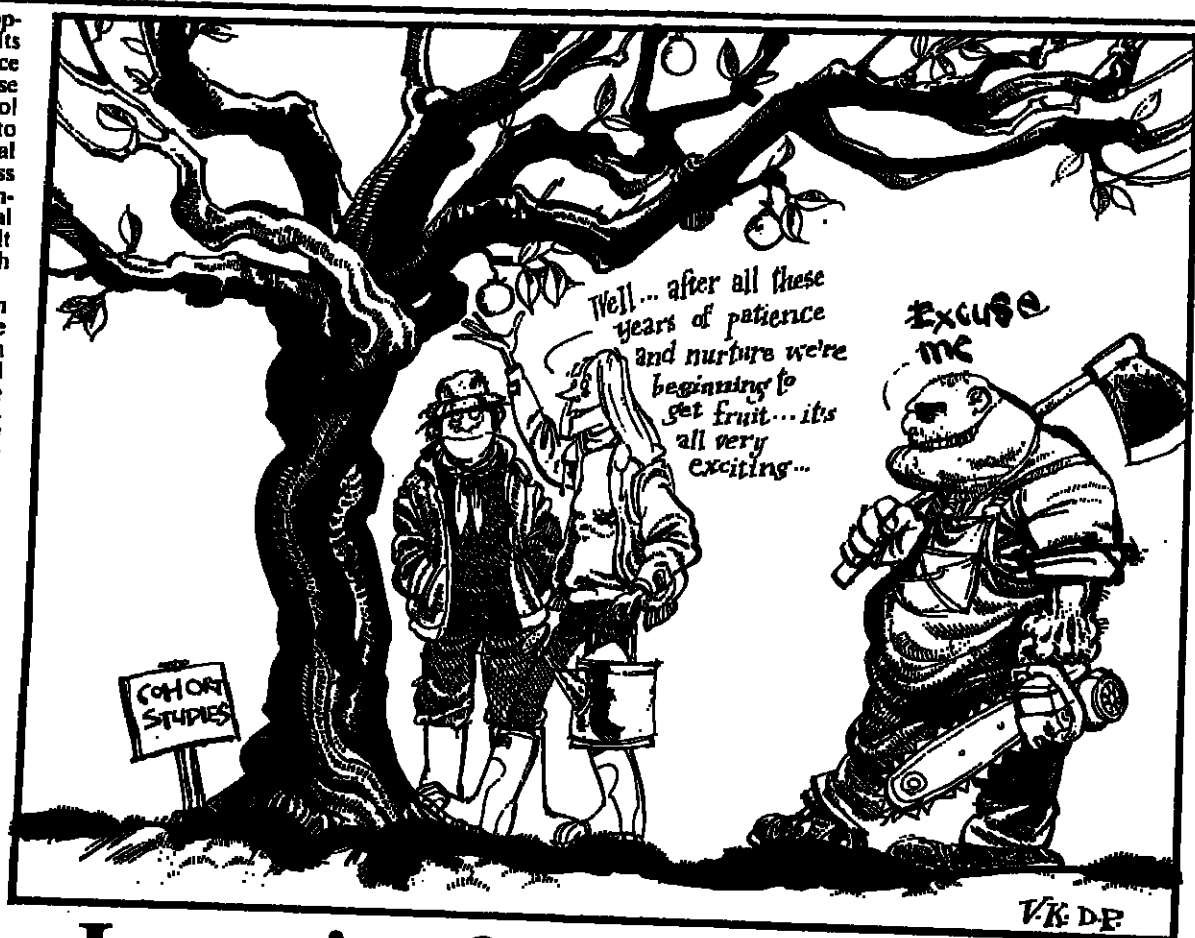
This capacity to monitor human behaviour and learn from it is not due only to the administrative organization which a monopoly supplier of social services can bring to bear. More important than bureaucratic machinery is the willingness of the subjects of the research and of thousands of anonymous people working in the social services to devote time and energy to the task of assembling and transmitting accurate information for research workers.

They do that because the working environment created for its staff by a welfare state gives them a collective responsibility for those whom they serve—not just an opportunity to make money out of them. And their patients, pupils and clients know this and trust them.

Among the most striking examples of the opportunities for learning which a welfare state offers us are the longitudinal studies which have for years traced the development of large "cohorts" of people born in a specific week long ago. Most readers of this paper will probably have heard of the best sellers produced by these studies: James Douglas's *The Home and the School* based on his 1946-born youngsters and Peter Wedge's and Hilary Prosser's *Born to Fail?* based on the National Child Development Study's 1958-born cohort are two of the best known examples. But they may not be aware of the loyalties which made this work possible.

Response rates of 90 per cent or more—far higher than those normally achieved in door-to-door surveys of the usual kind—were made possible by the pride many of the young subjects of these studies and their parents have in participating in them, and by the devotion of those who interview and examine them.

The 16-year-olds in the NCDS study, for example, were interviewed in 1974. A long questionnaire was completed by their school teacher who also tested them in various ways. Their parents provided a medical history and were interviewed at length by health visitors. Doctors of the school health service examined the youngsters. And all that work was carried out successfully in the midst of the 1974 reorgani-



Learning from experience

David Donnison looks at the importance of continuing British cohort studies

ization of local government.

It is no accident that when the World Health Organization made an independent review in 1981 of 65 of the best longitudinal studies in Europe (S. A. Mednick and A. E. Baer, *Prospective Longitudinal Research*) they awarded their accolade to a couple of welfare states: "The Lundby studies (in Sweden), the Aberdeen studies, and the Spanish National Child Development Study could profit by carefully scrutinizing these projects", they said. It is likewise no accident that as the welfare state comes under attack the main British cohort studies are worrying about their future.

Professor Colley's continuing work on James Douglas's 1946 cohort (the

National Survey of Health and Development) has no assurance of support beyond next year. Funding for Professor Butler's work on his 1970 cohort (Child health and education in the 1970s) runs out next spring. But the most critical situation is that facing the National Child Development Study at which current funding dries up at the end of 1984.

Why are these projects so vulnerable? They deal in large numbers and therefore look expensive. Continuing analysis of the data already gathered on the 15,000 26-year-olds of the NCDS cohort, plus "core funding" and keep open the possibility of further surveys of the cohort will cost £100,000 a year. But set against the 20

books and 200 chapters, articles and published papers so far produced by the NCDS, that's not an exorbitant sum. In a family history, such studies have thrown light on the effects of smoking in pregnancy, on asthma, short sight, epilepsy, the recent growth of impaired hearing among young people and many other conditions.

They have provided much of what we know about the effects of streaming and setting in secondary schools, the effects of living in an overcrowded home, the experience and achievement of immigrant children, children from one-parent families, unusually gifted children and much else. They have repeatedly been used by committees of inquiry as one of their main sources of hard evidence. Floden, Court and Warnock are examples and

there have been many others. The main problem is to be mounted by those who have to pay for these studies going is no one. Split between the four government departments currently interested in the NCDS, £100,000 is chiselled mainly in their capacity to use the period, to throw light on problems which may never have been envisaged at the time they were launched. Beginning as studies of maternal and infant health, no one foresaw that the most discussed findings would deal with education. When James Douglas took up the question of short sight in some spare weeks, he was confident that he could demolish what he believed to be the old wives' tale that clever children wear glasses - and found the old wives were, roughly speaking, right. Then he had to explain why, which led him on to one interesting thought.

The directors of cohort studies must have a sharp eye for unforeseen questions and serendipitous answers. They also need endless patience. It may take 15 years or more for their most important discoveries to emerge from the gradually mounting pile of files, by then their successors may have taken over.

The people who do this work are never too hurried, never too of one discipline, never over ambitious. Typical of the breed, James Douglas's hobby was building violins and other, laboriously carving and polishing their beautiful shapes for years before they were ready to play.

It is in a way to their credit that these people find it difficult to gain support in a world where government departments haggle over the precise number of questions which their continuing enquiries seem to "buy" in the next survey; a world in which civil servants like to foresee the answer before funding research on what might be politically explosive topics.

This work must go on. The NCDS and similar cohort studies are the envy of many other countries. They enable Britain to monitor the experience of its people and learn how to build a safer society.

To abandon these studies now, when they are moving into their most interesting phase yet (as the original cohorts find jobs and homes or fall in - marry and start new families) would be far worse than wasting a lot of research talent and the potentialities of data already assembled. It would be to forget what the welfare state is for.

The author is head of the department of town and regional planning at the University of Glasgow

BRITAIN'S BEGINNINGS 5: Jenny Wormald on the survival of the Anglo-Scottish union

The thistle and the rose

History has many cunning passages, contrived corridors. Few historical processes obey a neat, continuous logic. The final figure in the equation of Britain's beginnings had to wait nearly half a millennium from the end of the Anglo-Saxon period.

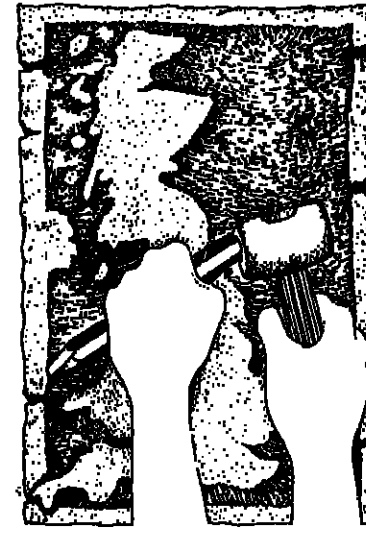
The Norman invasion brought the period of Old English culture to an abrupt end. It died, with its king and his brothers, "at the grey apple tree" near Hastings. For the next 300 years, yet another colonizing force held sway. William's conception of Britain, more "continental" than that of Alfred. As the idea of the British state developed along Norman lines, English culture and something of the idea of "Britain" itself went into cold storage.

The unfinished business lay to the west and north. Wales had for long enough been part of the same geographical orbit to merit a relatively rapid transition to "England-and-Wales". Ireland was a future conundrum. The later medieval and early modern periods were

marked by unremitting conflict between England and France in one direction and between England and the kingdom of Scotland in the other. Flodden and Bannockburn became the function signs of "Britain's" progress.

In the end, it was dynastic accident - and a version of the new European politics - that brought about the shape of modern Britain, a shape often enough threatened with redundancy, fragmentation, political "break-up", but still essentially the outline we know today. It was forged in 1603, the year of *Othello* and *King Lear*, and the colony at Jamestown; the age that brought the King James Bible and, despite civil war and our sole experiment in republicanism, say the hardening of the mould and the shift from purely national to imperial identity.

The Union of the Crowns in 1603, far more than the next step in the "British process", it remains one of the more mysterious events in British history, a turning-point still often dismissed as pre-modern political quaintness. But it speaks directly to our age...



James VI and I (right): a man of curious but deeply impressive political skills who insisted on remaining king of Scotland even after he had obtained the greater prize of the English crown.

The road to the incorporating union of 1707 was marked by unpromising milestones: the absolute refusal of the English to have anything to do with an idea so preposterous and humiliating to their national pride in the early years of James I; the failure of the Cromwellian union of the 1650s; the storms caused by the Scottish threat to withdraw altogether from the Hanoverian succession, and their utter refusal to see their kirk and their law tampered with in the years leading up to 1707 itself.

The puzzle of the survival of the Anglo-Scottish union, contrary to the experience of other countries and despite internal hostility to it, does not of course admit of a single explanation. But there is surely an underlying reason which has not been given much attention: the personality and ability of James VI and I, the first king of Britain and the only genuine believer in dual monarchy ever to sit on the British throne.

James presents us with a paradox: as James VI, English and Scottish historians alike admit to his ability; as James I, his reputation is very much more dubious, and although that reputation is now being reassessed, he still retains an aura of the buffoon, the pedant, the man of overweening vanity. There lingers on the idea that his success in Scotland can be attributed to the fact that politically and institutionally Scotland was so much less developed than England, that kingship meant no more than controlling overmighty magnates and thereby surviving. In other words, none of the king's experience before he came to the English throne equipped him for English kingship.

It is a curious point of view. What training had Henry VII, founder of the Tudor line, enjoyed, exiled in France before he won the battle of Bosworth and seized the crown in 1485? Or Mary and Elizabeth, both of favour and sometimes afraid for their lives before their accession? The only king of early modern England who can be regarded as "trained" was Charles I, the prince "bred in parliaments".

By contrast, James's experience was, by early modern English standards, unique: he was the only monarch who had never known what it was like not to be a king; and his political writings in the late 1590s, *The Trew Law of Free Monarchies*, and *Basiliikon Doron*, show how far he had developed a theory of kingship and, even more important, how politically skilled he was in that most fundamental of royal arts, the ability to act as king, to ride above and control faction, to manage men. It was a skill which an English king needed as much as any Scottish one. To that extent, James was the best trained of all English kings.

But beyond that fundamental skill, monarchy in England and monarchy in Scotland were very different things. There lay the visible troubles of James's English rule.

In Scotland, recurrent royal minorities throughout the 15th and 16th centuries, the absence of war which removed the need for the crown to make financial or military demands of its subjects, had made Scottish royal government considerably less interesting than English. It was also much less institutionalized, and more personal.

James, king of Scotland regularly attended parliaments and councils; as king of England he was cut off from these bodies, forced to work through intermediaries. For a man so adept at

debate and discussion, accustomed to achieve results by direct contact, the barriers erected in England were an endless source of frustration.

For the English, a king who tried to cut through these barriers, to suggest that they made royal government clumsy and unworkable, was touching a very sensitive nerve by appearing to attack their traditions; for the rights and precedents of the past were deeply ingrained in English political thought and language. It was a clash of styles between a man who simply wanted to get things done and men who knew that there was a right way in which they should be done - however much this meant actions waiting upon principles.

Moreover, James's insistence on remaining king of Scotland even after he had obtained the greater prize of the English crown was an endless cause of offence. Neither the Scots whom he brought south with him nor his one clear policy after 1603, the full union of the kingdoms, enhanced his standing in the eyes of his perplexed English subjects. They would have understood better the Scots of modern times, with all their uncertainties in their daily, northern Britain; their fear of being inferior and neglected.

They could not understand the Scots of the 17th century, with all the self-confidence of having remained independent and having forced themselves on the attention of the great powers of Europe; the people who in James's reign believed that he himself was the purest reformed kirk under heaven were not underdogs. When James's son Charles I gave up the use of his carefully designed Union Jack and reverted to separate national flags, he was surely reflecting the political reality that the English leopard and the Scottish lion would not lie down in peace and harmony.

And yet the union survived. Paradoxically, it did so because of exactly that factor which created such tensions and difficulties: just as in the Polish-Lithuanian union of 1385, it was the king of the lesser, not the greater, power who united the crowns.

Even the Scottish James had redeeming features from the English point of view. His accession, and only his accession, averted the horrors of strife, religious crisis, civil or foreign war. For all his insistence on remaining

king of Scotland, he was also enthusiastic about being king of England; and there were areas of considerable trouble under Elizabeth where he had some success. His style of government upset English sensibilities, but it also did something to reduce, at least for a time, the sheer weight of institutionalism which was threatening to make English government unworkable.

The government, under this *laissez-faire* and easy-going Scottish king, bore less heavily on the localities than Elizabeth had done or Charles was to do. His church, the Calvinist Episcopal church which was so much more to his own taste than the shrill Presbyterianism of Scotland, was more open to a wide range of opinion than it had been, or would be in the next reign; only the most extreme found no home there.

For the Scots, the massive disadvantage of absentee kingship was tempered by two things. First, the very fact of recurrent minorities had established a tradition of political management in the absence of an adult ruler. Second, and more important, James was still *their* king, despite his geographical remoteness; to their self-confidence was added the pride of having given their greatest enemy a king.

That crucial fact bought time - time for experience of the advantages as well as the disadvantages of dual monarchy to become sufficiently habitual that it would not easily be forgotten. It was the unique circumstances of a Scottish king reigning in London which prevented the Scots from following the example of the Portuguese and shaking off the foreigner at the first opportunity.

The clash between the direct approach of James VI and the more convoluted and rhetorical one of his English subjects was a microcosm of a wider reality: the very different reactions of early modern English and Scots people to that critical political question, how to deal with a king who failed to provide tolerable rule.

The tortured constitutional wranglings of the 14th century and the dynastic upheavals of the 15th in England had no parallel in Scotland; the two 15th-century kings who created enough resentment to provoke rebellion, James I and James III, were indeed violently removed, but without threat to the ruling line. Nor was there

any Scottish parallel to the legal debate that moved the political question on to the level of theory, a level on which the English were agonizingly trapped by the mid-17th century.

It has rightly been argued that there might have been no English civil war had it not been for the Scots revolt of 1637-38; it was the direct political action of the Scots against their king which sprang the English trap and released them back into the realms of political reality; and, as is well known, the Scots threw in their lot with the winning side, the English parliamentarians.

In the first half century of the union, therefore, a Scottish king and the Scottish kingdom played a crucial role. In time, the Scots did of course become aware that the interest of their monarchy in Scotland was increasingly tenuous.

James himself had seen as much; in one of his most moving speeches, his great plea to an unresponsive English parliament in 1607 for the union of the kingdoms, he spoke of how his ancient realm would become "as the northern shires, seldom seen and saluted by their king", and he spoke with sadness and realism. As that awareness sunk in so Scottish identity became confused, and the conflict between the desire to associate themselves culturally and politically with England - and also to emphasize their native traditions - came into being.

Yet it was the Scots who forced the issue in the early 18th century, when the strains of dual monarchy but separate kingdoms was becoming too great; and in the 19th century, Sir Walter Scott's inspiring nationalism evoked response throughout Europe but fell on deaf ears in his own country. Only in the 20th century has the general political and economic decline of Britain opened the way for a vocal Scottish Nationalist Party.

The virtually unchallenged existence of the union of England and Scotland from 1603 until very recently owes much to the confidence of the Scots of the 16th and early 17th centuries, their political traditions and the curious but deeply impressive political skills of James VI and I.

The author is lecturer in Scottish history at the University of Glasgow.

Friends come in from the shadows

Last year saw the "consecration" of two neglected French writers, Jean Grenier and Louis Guilloux. There was a ceremony and small display at the Bibliothèque in the autumn to mark the gift by Grenier's widow of a substantial archive, while Guilloux had the honour of a ten-day conference at Cerisy-la-Salle.

Jean Grenier was born in 1898 and Louis Guilloux in the following year. They were both brought up in the Breton town of Saint-Brieuc though they did not meet until 1917. They then became firm friends and remained so throughout their lives. Grenier was the philosopher; Guilloux the novelist, something like a Gaille Doszgevy and Tolstoy. In the years following the First World War they were members of a small group of aspiring writers in Paris which included André Champeau and Henri Pott; and they very soon had access to the publishing houses of Grasset and Gallimard.

Guilloux is often termed a *romancier politique*. He was awarded the Prix du roman populaire in 1942 for *Le Pain de Rives* and he had earlier been associated with Eugene Dabit when they both accompanied Gide to Russia in 1936. The inspiration for much of his writing came from the artists' society of pre-war Saint-Brieuc, where he grew up as the son of a cobbler and socialist militant.

His first short work, *Le Malin du peuple*, which portrays that milieu, reached a wide audience thanks to a preface contributed by Albert Camus to the 1952 edition. But his later work, beginning in 1934 with *Le Sang Noir*, are much broader in scope and are more explicit in their

J. S. T. Garfitt reviews the work of Jean Grenier and Louis Guilloux

humanistic concerns. The length of works like *Le Jeu de Patience*, which won the Prix Renaudot in 1949, is, however, deceptive. There may be many words but Guilloux succeeds in giving expression to the silence of those who do not push themselves forward; he is, as one commentator put it, a *discreet* rather than a *showman*.

His own life, whether as general dogbody in charge of the practical arrangements for the 1936 Congrès des écrivains pour la défense de la culture, or as a tireless worker on behalf of Spanish refugees during the Civil War, was devoted to the task of organizing and expressing the voices of ordinary people. Those who are prepared to listen have sometimes ranked *Le Sang Noir* alongside André Malraux's *La Condition Humaine* and Sartre's *La Nausee* and *Le Jeu de Patience* alongside Camus's *Le Peste*.

Grenier is known best as Camus's philosophy teacher and perhaps also as the man who inspired him to start writing. In fact Grenier wrote some 40 books of his own: two novels, art criticism, lyrical and philosophical essays. His correspondence with Camus, covering the period 1932 to

1960, offers a fascinating insight into the minds of two very private and sensitive individuals.

Grenier's writing is at once unassuming and compelling: he invites the reader to meditate with him, to accompany him on an extended improvisation which takes in everything from tobacco (in *La Vie quotidienne*) to Tolstoy (in *Les Entretiens sur le bon usage de la liberté* and *L'Esprit de l'homme*), from travel (in the early *Le Tao*), to problems of truth and orthodoxy (in *l'Essai sur l'esprit d'orthodoxie* and *Le Choix*). Hovering behind the written text there is always an intuition of the absolute, constantly undermining those human values which are nevertheless so important to life and artistic creation.

Several of Grenier's works have been published posthumously by Gallimard and, more recently, by Calligram, a small publishing house based in Quimper. The most recent volume by Guilloux to appear is *L'Herbe d'oubli*, an exploration of the author's early life in Saint-Brieuc, with some memorable episodes such as his two-month stint as secretary to the colourful socialist (and vegetarian) Augustin Hamon, but also of his whole literary project.

So far both Grenier and Guilloux have remained in the shadow of their more illustrious friends and contemporaries like Malraux and Camus, but there are strong signs that this is changing. The invitation to join them on their *flânerie* is well worth accepting.

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Jean Grenier at Bag-an-Fourm in June 1970

BOOKS

Shaking the pedestals of the great

by Kenneth Minogue

Philosophy in History: essays on the historiography of philosophy edited by Richard Rorty, J. B. Schneewind and Quentin Skinner. Cambridge University Press, £27.50 and £7.95. ISBN 0 521 25352 7 and 27330 7.

Philosophy in History is less a book than a flagship. It is the first work in a promising new Cambridge series called "Ideas in Context". Some time ago, the excellent "Studies in the History and Theory of Politics" was quietly done away with. Now comes this new venture, with a new personnel. The series is dead. Long live the series.

Fortunately the flagship can be warmly welcomed. It contains some essays dealing with substantive issues in the history of philosophy. They range from ancient and modern scepticism to the Moore-Russell revolt against idealism. Other essays focus on methodological questions. These latter pieces are relatively modest in tone, and consolidate the attempts made over recent decades to insulate the history of thought from at least the grosser forms of anachronism. The problem arises because philosophy, like every human utterance is from its inception carried over further away from us, and the search for its meaning requires determined efforts to supply the contextual materials for its comprehension. The past being another country, we must learn its customs if we would understand it. On the other hand, a philosophical utterance is deliberately designed to defeat this very contextuality. Accepting such utterances at face value, we happily enter into those timeless conversations with the great which often constitute (among other things) the main excitement of courses on philosophy.

Philosophy in History focuses directly on the central dilemma of the area. One side of that dilemma is dealt with by Wolf Lepenies: "There is a deep anti-historical mood in all philosophy, a continuous and continuously astonishing confidence of the philosophizing ego in its abilities to procure and to enjoy the peculiar charm that only a definite and complete knowledge can provide." Modern philosophy, he observes, began with the radical Cartesian break

with the past. Such, at least, is the legend of modern philosophy, and some of the contributors believe it important that we should recognize the reality of radical discontinuities in the history of philosophy. On the other hand, radical discontinuities are to historians what red rags are to bulls. Along with the whole apparatus of revolutions and paradigm shifts, they represent a fundamentally mystification challenge to the historian's project of explaining an idea or an event in terms of its circumstantial past. In these terms, Descartes is the culmination of many movements of ideas rather than the beginning of modern philosophy.

The question remains – and it is the other side of the dilemma that must be posed – whether philosophers need take much notice of their history. It is common ground to all the writers in the volume – and indeed, I think, a sound view – that philosophy is necessarily involved with its own past, and will suffer if it does not recognize and use this dependence. Thus Michael Frede, at the end of a skilful analysis of the subtleties of classical scepticism, concludes that the modern sceptical tradition based its argument upon a dogmatic version of the ancient doctrine and thus failed to criticize adequately the framework of knowledge it was trying to repudiate. Yet leaving aside the substance of this remark, one may wonder whether this supposed failure was the necessary result of historical ignorance. There is in philosophy an almost unavoidable oscillation between the history of philosophy and what A. J. Ayer in *Philosophy in the Twentieth Century* calls "the philosophical inheritance". That we may learn new moves in the philosophical game, or sharpen our arguments, by attending to past thought, as generals benefit from fighting Marathon and Waterloo over again, is not the same as knowing that the history of philosophy can contribute to contemporary philosophy.

One way of bringing out the central point is to observe that in the expression "history of philosophy" the words in attribution merely describe the starting point from which an historical inquiry may begin. The real historian who takes up Plato's theory of forms or innate ideas in Descartes will soon find himself immersed in a world of ideas which may, from an analytical point of view, be recognized as theological,

scientific or technological. He will, of course, sometimes find that events in the world – falling apples, heated stones, trips to Sicily and the like – will be part of the complex pattern composing his history. To describe the resulting achievement as a history "of philosophy" will thus be at best a rough approximation; just as in the case of a historian writing a history "of France", the entity called "France" at the beginning of the story will be utterly different from the entity called "France" at the end of it.

One kind of history of philosophy which gets no sympathy from any contributor is backward extrapolation; attacks on this way of dealing with the past largely replicate the splendid polemic which Joseph Agassi years ago concentrated on the same method in the history of science. The worst historical crime – we commit it in practice every day – is to see the past in our terms rather than theirs.

The history of philosophy is thus now dominated by partisans of the past, and this means that the most vulnerable are those who are not. Attacks on this way of dealing with the past largely replicate the splendid polemic which Joseph Agassi years ago concentrated on the same method in the history of science. The worst historical crime – we commit it in practice every day – is to see the past in our terms rather than theirs.

Sophistication in this field clearly consists in becoming aware of the many different kinds of relation we can have with the dead. Rorty sets up the taxonomy of these relations, distinguishing initially between historical reconstruction in which we seek to retrieve the past thinkers in their own terms (he cites John Dunn on Locke as an example) and the kind of rational reconstruction in which past thinkers are stripped down and reconstructed

so as to be fit to participate in the modern philosophical conversation – as Peter Strawson is said to have done with Kant. What really interests Rorty, however, is something he calls "Geistesgeschichte as canon formation", which is the philosopher's revival of ancestor worship. These versions of past thought result in canons superior to the despised Plato-to-Nato halls of fame because, so it is argued, they can draw coherence from some underlying problematic.

Some of the writers construe the past as a vehicle of liberation, notably Charles Taylor who presents a "releasing the fly from the bottle" version of what history can contribute to philosophy. His thesis turns upon the idea, common to several contributors, that we often find ourselves in an epistemological prison constituted by assumptions too basic to be easily available for examination. We forget how the assumptions we now take for granted came originally to have the status they do, and "in order to undo the forgetting" we must ascend to the original, the point when the new model of the world became current. "Freeing ourselves from the presumption of uniqueness requires uncovering the origins. That is why philosophy is inescapably historical." This identification of philosophy itself with the project of liberation pinches the matter too high, but such judgements of level are perhaps inherent in the difficult business of exploring philosophy's relation with history.

Quentin Skinner's lively piece on negative and positive liberty is grouped with the methodological pieces; and rightly so, for it represents a modification of his earlier view that past thinkers cannot help us to solve contemporary problems of analysis because they are inseparable from the context (especially the conventions) of their own time, and hence "we must do our thinking for ourselves". The problem of liberty he seeks to solve arises because some contemporary writers restrict the range of the concept by reference to the meaning of the word in standard usage. Hence Skinner, like Taylor, seeks to o'erleap the restrictions of contemporary usage by an appeal to the fact that the term "liberty" has at other times been put to unfamiliar but coherent uses. Reculer to the last world of Machiavellian civic republicanism can allow us *mieux* to see the prejudices of a version of

linguistic philosophy threatening (somehow implausibly) to trap us in the usages of our own lingo. The central thesis of Skinner's argument – that a theory of liberty must find a place for positive elements – seems to me entirely true. The difficulty with his argument is that it slides from the issue of how liberty is to be defined to the way of social support. The result is that the exemplary virtue of Machiavelli is brought out by a running contrast with the vice of Hobbes, who is said to be "dogmatic", "disingenuous" and all that charges on which I think Hobbes ought to be acquitted. Indeed, on the essential point – that freedom is impossible without respect for law – Machiavelli and Hobbes are entirely at one.

The second part of the book contains some excellent essays on classical scepticism. Locke's idea of truth, the early Frege, and the Russell-Moore revolt against idealism. Here the same themes tend to recur *ambiguously* is perhaps how they best ought to occur since it is often the case that they yield relatively vacuous results if tackled too ambitiously. What is striking about these reflections is that none of the contributors comes out boldly for error, on Baconian grounds. Nearly all of them are dealing with historical mistakes – thus Russell, like Moore, is found to be attacking a mere caricature of Kantianism. Living philosophers have a deplorable record of historical carelessness when it comes to dealing with the writers they attribute to their predecessors. From this point of view, the history of philosophy is nothing but a comedy of errors. Similarly, it is virtually a pedagogic inevitability that undergraduates will in their early studies pick up the abstract thing called "doctrines" rather than any sound historical account of what happens when philosophers *concretely* think through a problem. Life isn't just a matter of releasing flies from bottles. It also consists in buzzing around the comfortable places we live in, however necessary it is to get a breath of fresh air now and again.

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Too clever by half

German Aesthetic and Literary Criticism: the romantic ironists and Goethe edited by Kathleen Wheeler. Cambridge University Press, £25.00 and £7.95. ISBN 0 521 23631 2 and 28087 7.

Byron, on reading Friedrich Schlegel, the leading German Romantic literary theorist, thought that he "evidently shows great power of words, but that he is spinning on the verge of meaning, and let him go down like the sunset, or melt like the rainbow, leaving a rich confusion." Unfair Byron undoubtedly was, but there is a kernel of truth in his reaction. Some of the German Romantics when writing on literary theory and criticism paraded their cleverness, but – alas! – they are often too clever by half. It is indeed not easy to tell the wheat from the chaff.

The Romantic belief that all literary criticism should be poetic does not always make their writing easily intelligible. Their approach springs from an attempt to reverse the development of the rise of science and to undo the work of the Enlightenment. Clarity of thought was spurned and a poetic approach was proclaimed in its stead. Not all the selections in this volume are however representative of this approach, for they include Goethe, but he is here in the wrong company. However challenging it is to read

Goethe, even the editor's special pleading does not justify his inclusion. For he dismissed Romanticism as "dis-eased". Indeed, the Romantics had a baneful impact on the German political thought, but their literary theory and criticism matter. In particular, Friedrich Schlegel, a brilliant, imaginative and often wayward writer, had a seminal influence. For him, interpretation, evaluation and literary history were inextricably linked as parts of the same process. Literary history owes much to his pioneering effort; so too does criticism, although his elder brother August Wilhelm's *Lectures on Dramatic Art and Theory* (from which extracts are given) stole the show.

Of the other writers included here Novalis (Friedrich von Hardenberg) alone was a major poet. His writings on literature are, like much of his work, more often than not evocative observations jotted down almost at random (the fragmentary mode of writing was in fact one of the Romantics' deliberate ploys). For Novalis poetry was the true and absolute reality; it is this hardly surprising that he is often elusive. F. K. W. Solger and Jean Paul (Friedrich Richter), a humorous novelist in the tradition of Sterne, are more sober writers on aesthetics. Their comments on wit, humour and irony repay reading.

Irony occupies a major place in Romantic terminology; for Friedrich Schlegel it supplies the very essence of literature. Indeed, the Romantics extended the term to signify the author's ability to achieve detachment and his material, thereby diluting its meaning almost completely. Friedrich Schlegel demanded "universal poetry" which should include philosophy and poetry side by side and for which the

novel was the most suitable genre; in practice a rather extravagant suggestion. In fact, the German Romantics were, in the main, poor philosophers.

In her introduction which she prefaces with a motto chosen from Friedrich Schlegel's aphorisms: "A good preface must be at once the square and the square root of its book" (whatever that may mean, apart from pointing to Schlegel's predictably unsuccessful attempts to express ideas on literature in mathematical terms), Kathleen Wheeler discusses the Romantics' attitudes towards literature. Unfortunately she does not appear to have a sound grasp of German literary and intellectual history. Her style is too often opaque and what she says is too frequently misleading and inadequate. To mention some of the more glaring errors: she speaks of Kant's "moral relativism"; thus unconsciously distorting his ethics. She misrepresents Herder's view of the novel and she mistakenly equates Schiller's concepts of *naïve* and *sentimental* with objective and subjective respectively. It is a pity that, in addition to Novalis's praise of the poetic power of Goethe's *Wilhelm Meister's Apprenticeship*, Kathleen Wheeler does not include his later polemic against the novel which he then called "the Gendarm directed against poetry". She would have thus provided a more balanced account. But despite these and other serious shortcomings it is worth while to comb these selections for suggestive observations on literature and aesthetics.

Hans Reiss

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BOOKS

Feminine endings

Language, the Sexes and Society by Philip M. Smith. Blackwell, £17.50 and £6.50. ISBN 0 631 11111 5 and 12753 4.

We've come a long way since Sir Thomas Eliot wrote in his *Gouverneur* in 1531 that women were responsible for the corruption of English. Not only is the conventional wisdom now that women speak more "correctly" than men (though this, as Philip Smith points out, is a dubious claim), but it has also been shown that our language treats men and women unequally, helping to perpetuate the sexual divisions of society.

The special merit of this book is that it brings together in a single analytical framework the different strands of research on language and the sexes that has been conducted during the last twenty years. It contains, for example, an up-to-date survey of the different ways in which women and men use language, and of the ways in which language acts as a social "tell-tale", revealing the different social statuses accorded to women and men. It goes far beyond this, however: a central theme of the book is that our current emphasis on simply charting differences is short-sighted. We need to know more than that men may drop their h's more often than women, or that men tend to interrupt women more often than women interrupt men. These generalizations stem from the overwhelming preoccupation in the social sciences to treat "female" and "male" as uniform, self-evident categories, that require description rather than explanation. This, Smith argues, is an ethnocentric view that blinkers us from achieving a proper understanding of the "sexual sub-culture" in our society.

Smith argues that we use the concepts of masculinity and femininity to equate us with stereotypes about how men and women should behave. These stereotypes apply to language, as to all types of social behaviour. Two chapters of the book report on a series of experiments that investigate the nature and the effect of these stereotypes. We find, for example, that "sensitive", "shy" and "unpredictable" are feminine stereotypical items, of which "sensitive" is desirable for

both sexes, "shy" is desirable for women only, and "unpredictable" is desirable for neither; similarly, "logical", "assertive" and "boastful" are masculine stereotypical items, with "logical" desirable for both sexes, "assertive" desirable for men only and "boastful" not desirable at all. We find, too, that listeners can make interesting judgements about people's perceived masculinity or femininity on hearing short stretches of their speech; and that there are extremely interesting correlations between these judgements and both the speakers' and the listeners' self-assessed perceptions of their own masculinity and femininity. It seems, for instance, that the more closely people identify with their own gender group, the more likely they are to perceive members of their own sex as having varying personality traits, and to perceive members of the opposite sex as being uniform.

Still more interesting, though, is that the norms of femininity and masculinity can account for many of the differences in female and male communicative styles that have been reported in the literature on language and the sexes. Smith emphasizes throughout that the norms are not bipolar contrasts, but that they represent two independent, intersecting dimensions; both men and women, therefore, may be rated highly on either masculinity or femininity (with no inverse relationship implied) – or they may be androgynous, or undifferentiated. If, however, we are prepared to accept that our upbringing is likely to predispose men, on average,

to be more concerned with the preoccupations of masculinity, and women with preoccupations of femininity, then we might also accept the possibility that they have different goals in communication. Men will tend to try to control the process of interaction, and its outcome, while women will try to manage what psychologists term "affiliative goals", that is to establish a warm and sympathetic relationship.

If this is so, then women and men must sometimes be at cross-purposes in their communications, leading, Smith suggests, to mutual misunderstanding, conflict and dissatisfaction. Both men and women need to broaden their communicative skills – at present it is women who are learning the control-related skill of assertion, but a more creative strategy for social change would be for men to learn affiliative skills too.

This is a fascinating book, and an important one. It is a considerable achievement to have brought the different strands of the language and sex issue into a single social psychological framework. The jargon may be occasionally off-putting for non-psychologists, but anyone who doubts the possibility of writing elegantly on academic subjects without using the so-called sex-indefinite pronoun would do well to use this book as a model.

Jenny Cheshire

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Categories of short story

Short Stories and Short Fictions

1880-1980 by Clare Hanson. Macmillan, £20.00. ISBN 0 333 34500 9.

In recent years the short story has begun to make a comeback in this country after a considerable period of unjustifiable neglect. Clare Hanson's useful book, then, appears at an appropriate time; and happily it is not only sensible and perceptive but also clearly written and almost free of the jargon and solecism characteristic of so much of today's criticism. (Not quite free. She permits herself the not uncommon contradiction-in-terms of

"centre around" and makes a few genuflections to structuralist idiom.)

The work begins with the orthodox division of the form into tales of action or plot and, succeeding them, tales of psychology or mood, interestingly going on to relate the changeover to wider fields. So, we have "the movement from 'teller' to indirect free narration, and from 'tale' to 'text'" seen as part of the wider movement from "discourse" to "image". In the art and literature of 1880-1910. On the other hand, the tale of action is linked to the traditional oral tale where significance inheres more in a particular configuration of events than in an individual human nature or response and relies on a communal consensus; whereas the tale of mood is related to the world of individualism, symbolist poetry, and the psychological sketch or prose poem of the 1890s. Oddly – at any rate at first sight – the latter kind of short story is seen to be more closely linked with realism (though of a subjective sort) than the former.

Clare Hanson valiantly tries to establish different terms for these two



"Night" by Jacob Epstein, 1929. An illustration from Dennis Farr's *English Art 1870-1940* published as a paperback by Oxford University Press at £12.50.

varieties: the "short story" and the "short fiction", respectively. The tide of language, however, seems to be flowing too strongly against her. She herself is sometimes forced to lapse into calling her "fictions" stories – and of course since the "stories" are fictional anyway it's a moot point as to whether the distinction would clarify even if it were to be adopted. Certainly it tends to blur what is probably the most important and useful distinction in the whole book: that *within* "short fictions", between "the modernist short fiction and the free story".

The free story is rightly seen as the major kind of short story in this century. It is neatly distinguished as a modern form that turns its back on modernism. Symbolist and modernist short fiction has interrogated the concept of a coherent, historical character, whereas the free story may often pivot on the exploration of character in the traditional sense – human beings are valued for their "character" in the sense of their uniqueness and idiosyncrasy.

Where the traditional story has affinities with folk tale, the modernist story with lyric poem, the free story has closer affinities with the novel and the visual arts.

This tripartite division enables most of the major short-story writers, from the golden age of the 1890s and the Edwardian period up to the present day, to be usefully placed and rewardingly discussed. It seems a pity that such great exponents of the form as Hardy and Lawrence are deliberately omitted for the sake of "the clearer picture which emerges of the special characteristics of the short form". For it is always salutary to be reminded that critical compartmenting, though useful and valid, is never absolutely true. Exceptions and hybrid forms abound – and tend to include some of the best literary examples of the form among them.

Allan Rodway

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Restoring the text

Robert Louis Stevenson and "The Beach of Falesa": a study in Victorian publishing with the original text by Barry Menikoff. Edinburgh University Press, £15.00. ISBN 0 85244 500 9.

"The Beach of Falesa" is increasingly recognized as one of Robert Louis Stevenson's best and most characteristic shorter works. It contains some of his most vibrant story-telling, by far his most ambitious and experimental use of oral registers and dialect, and his strongest critique of "western" values. The novella dispels any residual impression that Stevenson was merely a juvenile novelist of action. Round rather unpromising material – the marriage of a Polynesian girl to a white trader, and the villainy of his rival – Stevenson built a fiction of considerable psychological power and literary coherence. John Wiltshire is his most inward and completely imagined narrator, and Uma, the child-wife, one of Stevenson's few convincing female characters.

The irony surrounding critical recognition of "The Beach" is that only now, with Professor Menikoff's edition, is it possible to read the tale in the form Stevenson intended. Even John Calder's "unexpurgated" Penguin edition of 1979 did no more than restore Stevenson's original wording of a joint marriage contract between Wiltshire and Uma, a cynical exploitation of native credulity: "illegally married...for one night to Mr John Wiltshire (who) is at liberty to send her to

hell next morning". Stevenson had known this would offend Victorian sensibilities and was sardonically willing to listen to revisions: "If the dears prefer a week, why then I'll give them ten days". Even so, such liberties were taken with the details of his text (and its title) that what appeared was no more than the "slashed and gaping ruins" of the work he had written.

In 1892, even in the isolation of Samoa, Stevenson was conscious of the public backlash against Thomas Hardy's *Tess of the D'Urbervilles*, which had appeared the previous year. Though he believed that "I never did a better piece of work", he knew that that great hulking, bullerous whale, the public, would be "unwelcome to that great hulking, bullerous whale, the public". The readers who had devoured Stevenson for his Scottish tales with suspicion and distaste.

The moral censorship of "The Beach" tends to obscure a far more insidious process of textual corruption. Stevenson's manuscript, which presented an "interior" narrative of some verbal and psychological complexity, was "normalized" successively by editor, sub-editors and printers before schooled in correct usage than in stylistics. Stevenson's unique punctuation, intended to catch the rhythm of Wiltshire's thought and other characters' speech, was abandoned wholesale; phonetic spellings were changed; syntax regularized. Stevenson had set out to make a linguistic experiment. "The Beach" of his life was not just a place; it also referred to the "Beach de mar" argot of Pacific sailors and traders.

Though by and large only accidentals were touched, the cumulative effect was to produce a new text, not Stevenson's, and ultimately a plethora of unreliable texts; before Professor Menikoff's transcription

from the holograph, there have been six printed versions.

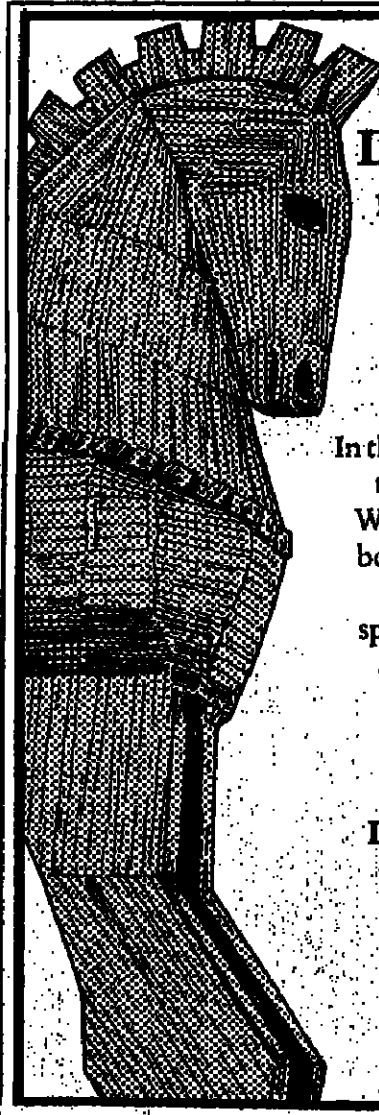
The puzzle is why Stevenson allowed such vandalism at all. The story was too short, too "strong", too little in key with current tastes, an unmarketable subject at an unmerchandizable length. Yet Stevenson was an established and successful author, able in the 1880s to command an astonishing £15 per thousand words. It seems that two main factors determined his apparent diffidence about proofs and the fate of his text: Stevenson lived thousands of miles from London and was in failing health; he had to put his faith in proxies at home, notably Sidney Colvin, then again, the household at Valima had grown larger and more demanding.

There was no time, especially given the vagaries of the postal system, to stand on literary niceties. In the end, geography, prudery, money, misplaced confidence in friends, simple compromise, and above all an increasingly industrialized, mass-market approach to literary publishing conspired to yield a bastard text.

Professor Menikoff does more than restore a much-mangled novella. He provides a uniquely documented case history of Victorian publishing. What remains unclear, perhaps, is the extent to which Stevenson's special nature and circumstances make him a unique case and how much "The Beach of Falesa" illustrates a major trend. This study does do a suggest that literary censorship is not limited to moral censure and that there are more effective, if less obvious, ways of bringing an author to heel than by correcting his characters' manners.

Brian Morton

Brian Morton is features editor of the *THES*.



Where was Troy?

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Friedrich Schlegel, as painted by Delphine de Castille, around 1815.

BOOKS

Sizing up economies

The Economics of Industrial Society
by Michio Morishima
translated by Douglas Anthony, John
Clark and Janet Hunter
Cambridge University Press, £27.50
and £9.95
ISBN 0 521 26700 5 and 31823 8

Professor Morishima has set himself the unenviable task of writing an introductory textbook with a higher level of content than A level economics. This is to avoid the repetition frequently encountered in first-year lecture courses increasingly populated by students who have already studied basic economic theory. Although the book is based on the author's first-year lectures at the London School of Economics he believes that the book has much to offer second-year, and even third and fourth-year students as well as fellow members of the econ tribe.

The approach is certainly radical. Many of the standard neoclassical constructs are either ignored altogether or accorded only the "barest mention". This approach is deliberate for, as the author explains, he is convinced that alternative economic theories are required to provide insights into the operation of differing economic systems. Capitalist systems are heterogeneous. Although the USA, West Germany, Japan and the UK are predominantly private enterprise economies "their historical experience and cultural traditions differ, and the lives, beliefs, and modes of behaviour of their people are certainly not the same". So much for the universality of homo economicus!

Industrial countries are divided into three groups: "large, medium-sized and small". The large industrial economy is rich in natural resources and has a high level of technological development. The USA is clearly in this category. The UK is a medium-sized industrial nation and along with Italy, Japan, and to a lesser extent West Germany and France, is dependent on other countries for many of its industrial raw materials. Such economies also have small mining and agricultural sectors. This makes the UK and Japan "archetypal medium-sized nations" since in the case of the UK these sectors accounted for only 4 per cent of gross national product in 1978. Professor Morishima is primarily concerned



At the Heywood-Wakefield Company in Chicago, a man weaving reed furniture by hand in 1920. An illustration from Sharon Darling's *Chicago Furniture: art, craft and industry 1833-1983* (Norton, £40.00).

with formulating a theory of medium-sized industrial nations where trade is a significant matter, "literally one of life and death".

The book is divided into two main parts with the first devoted to an analysis of price determination. Morishima adopts the Hicksian distinction between "fixprice" and "flexprice" markets with industrial manufactured products representative of the former and agricultural and other commodities being produced in the latter. Commodity prices and exchange rates are determined in an orthodox way via the demand-supply mechanism. But what of manufactured products? Here the author adopts the Kalecki-Weintraub Post Keynesian approach in following the full cost pricing principle. In Morishima's view it is legitimate to distinguish between "flexprice neoclassical type economies" and "fixprice Kalecki-Keynes type economies". Britain with a low ratio (13 per cent in 1973) of the value of output produced in the flexprice sector to the full cost sector is an economy with distinctly Post Keynesian characteristics. Thus "it certainly was no accident that the Keynesian Revolution in economics occurred in Britain". Keynesianism, it would seem, was not an autonomous development in pure theory but a response of theory to major changes in the structure of the UK economy, changes which began perhaps in 1890.

Part two concentrates on macroeconomic issues. The influence of Keynes (and to a lesser degree Marx) permeates this section with Say's Law subjected to intense criticism. Morishima also rejects the monetarist and neo-classical view that the economy will gravitate automatically towards some elusive natural rate of unemployment. The flexprice economy is dominated by quantity rather than price adjustment in response to nominal fluctuations in aggregate demand. The controversial argument that employment can be stimulated via wage cuts is decisively rejected and Keynes's view that even with complete flexibility of money wages full employment will not necessarily be realized is given support by Morishima's analysis. Hence activist fiscal and monetary policies still have a role to play in the medium-sized Keynesian type industrial economy. The flexprice world of Professor Lucas and his associates is simply not relevant to real industrial nations evolving through time in an uncertain world.

The central thrust of Morishima's argument will obviously not appeal to Chicago-style neoclassical purists who prefer to remain within the cocoon of equilibrium theorising. Professor Stiglitz in his Nobel lecture has explicitly rejected the approach adopted here when he argued that "a viable and healthy science requires both the persistent and timeless theories that

A critical point

Industrial Relations in the Future:
trends and possibilities in Britain over
the next decade
by Michael Poole et al
Routledge & Kegan Paul, £7.95
ISBN 0 7102 0145 1

There is a growing belief that industrial relations has reached a critical point in its development. The power of organized labour is already suffering from unemployment, job insecurity, government legislation and a lack of coherence in the Labour Party. In addition, union strength is being further eroded by a general reduction in employer dependence on labour as a result of new technology, and a specific reduction of dependence on British labour as a result of the internationalization of manufacturing production processes.

To what extent, and at what rate industrial relations is changing in response to these altered circumstances is, however, unclear. Some places are experiencing change more acutely than others; some work groups are

better equipped to influence the change process than others. Given this diversity, discussions of the future take on an added interest, though the degree of environmental uncertainty puts all but the most obvious of predictions at more risk than usual of being wide of the mark.

The present book reduces the element of risk by restricting the forecasting horizon to the next decade. The three essays in the book offer quite distinct perspectives. In the first, William Brown and Keith Sisson offer a mainstream industrial relations summary of current trends and some possible developments. Among the latter, the increased role of the state is given prominence, with questions of trade union immunities in industrial disputes, together with closed shop practices, identified as particularly likely to attract continued political attention. In contrasting industrial relations developments in the private and public sectors, Brown and Sisson point to public sector pay determination as a potentially serious problem in coming years. They urge the need for a comprehensive policy on public sector pay, backed up by some form of comparability machinery.

In terms of forecasting future levels of strike activity, Brown and his colleagues counsel caution, as patterns are likely to be influenced by a small number of large strikes. Nevertheless, a gradual decline in the number of strikes is anticipated, due in part to the decline of former strike-prone industries, and the continuing shift away from manufacturing to service industries.

In the second part, Michael Poole adopts a more sociological approach in reviewing the broad environmental changes taking place. These include economic, political and technological developments as well as subjective factors, such as the changing attitudes to work. This establishes the backdrop against which Poole views changes in the main industrial relations groups. Like several other books in the field recently, Poole emphasizes the increased visibility of management strategy in industrial relations in coming years. In part, this is seen as likely to take the form of management seeking to increase control by establishing more direct communication with the shopfloor, and by-passing the local union organization.

In his conclusion, Poole points to major drawbacks of the present system and to the need to recognize the choices available to improve, or at least prevent the further deterioration of, industrial relations. In particular, a major weakness of those relations in Britain is seen to be their excessive reliance on collective bargaining, which acts to ensure not only that power is ultimately decisive in the distribution of rewards but also that the continuing struggle for control prevents the development of more creative relations.

In the final section, Jill Rubery and her colleagues view industrial relations developments from a macroeconomic perspective, and principally how economic and social conditions influence bargaining activity. As in the earlier essays, continued high unemployment is viewed as a strong influence on the development of industrial relations, along with the declining numbers of jobs in manufacturing and the slow growth in real incomes. On the future, a continued emphasis on competitiveness is expected to create major conflict between, on the one hand, management's priority to increase labour flexibility and cut labour costs, and on the other hand, trade unions' concern to maintain or improve living standards and the degree of job protection and security.

As the authors note in the introduction, the three sections represent contrasting styles and diverse approaches to industrial relations. At times, the attempt to cover broad areas leads to an overschematic treatment of arguments. Also, the sections stand largely independent of one another, with the introduction going only part way to drawing out the common themes. Nevertheless, the endeavour to provide a breadth often lacking in books on industrial relations is worthwhile and attests to the potential value of a multi-disciplinary approach to this many-faceted subject.

Paul Blyton

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the outcomes are not acceptable rather than beginning again. Analogous with the American Catholic bishops' view on nuclear deterrence, Keohane believes that though existing international regimes may be better than none at all, we are not thereby absolved from the responsibility to improve them.

Keohane's pessimism about the capacity of a non-hegemonic world to develop new benign regimes is hardly borne out either by the formation of the IEA between 1974 and 1978 or by later 19th-century experience. The Universal Postal Union was created in 1874 and in 1883 an agreement was reached on trade marks and patents. European subsidies to beet sugar exporters and tariffs on imported sugar were brought to an end by an international convention signed at Brussels in 1902. The gold standard emerged as an international monetary system more or less spontaneously. International regime failure between the world wars stemmed principally from both the hegemony and the isolationism of the United States. Keohane does not discuss the contribution of the cold war to the willingness to cooperate in international regimes but that surely has played a part. Solidarity is generally encouraged when there is an external enemy.

Sovereign governments will often follow the rules of international organizations even when they are not in a government's immediate interests, because of linkages with other issues and the need to maintain a reputation for reliability. Hegemony is not necessary nor sufficient for cooperation but does help setting up international regimes. Set-up costs suggest, Keohane there it is to be said for modifying existing institutions when

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BOOKS

Political observer

Walter Lippmann: cosmopolitanism in the century of total war
by Steven D. Blum
Cornell University Press, \$21.95
ISBN 0 8014 1676 0

Ten years after his death Walter Lippmann's career continues to challenge our understanding of public affairs in the 20th century. It is a measure of the scope of his interests, the length of his professional life as a journalist, and the extent of his influence that it is appropriate to characterize his life's work in these apparently inflated terms. For the best part of sixty years he beamed what an admiring observer once called his "searchlight mind" on American and international affairs. Much more than a journalist, he virtually invented the career of political columnist to the extent that his opinions are themselves part of the historical record.

Steven Blum's study follows in the wake of Ronald Steel's magnificent biography (1980) and neatly complements it. He wants in the first place to remind us that Lippmann regularly reiterated from the floor of events to his "pool of silence" (Lippmann's own term) in order to reflect on the fundamentals of ethics and politics. Blum's account traces Lippmann the philosopher through the succession of books which began with *A Preface to Politics* (1913) and ended with *The Public Philosophy* (1955). His contribution to political philosophy was considerable. He can claim to have pioneered the application of Freudian psychology to political analysis - and this in his first book, and his *Public Opinion* (1922) is still a standard reference point for students of this subject. Beyond that, opinions differ on the weight and coherence of his philosophical output.

Previous commentators have offered two basic interpretive frameworks. According to one view there is a steady development (generally taken to be a decline) from the youthful upbeat liberalism of his early books to the ungenerous elitism of his middle and late period. The early apostle of collectivism and reform became the arch sceptic who doubted the capacity of the people to sustain democracy and the capacity of governments to manage it. The other interpretive model simply proposes that Lippmann was a muddled and inconsistent thinker. His philosophical writ-

ings, according to this view, represent no more than a succession of gestures in the direction of coherence, the sole unifying elements being their common authorship and an engaging prose style.

Blum will have none of this. His second and chief aim is to suggest that a consistent theme pervades Lippmann's entire output - that of "cosmopolitanism". Employing the term initially in its most obvious sense, Blum portrays Lippmann as being engaged in a search for a philosophical outlook which made sense of America's place in the wider world, an intellectual posture which came naturally to one who was exposed during childhood to foreign ideas and foreign travel. From this perspective, Blum argues, it is possible to iron out the apparent inconsistency between, for example, Lippmann's Wilsonian internationalism in the twenties and his advocacy of *Realpolitik* in the forties. Both, we are told, grew out of his perception of the interdependence between American interests and the differing realities of world politics in these periods, the enemy all along being American parochialism. One of Lippmann's distinctive qualities, Blum believes, was his detachment from "the preoccupa-

tion and prejudices of his homeland". But Blum also uses his keyword "cosmopolitanism" to designate what Lippmann's early mentor Graham Wallis called "the Great Society" - that condition of 20th-century life which increasingly tied local communities to the larger network of industrial society. Lippmann's preoccupation with public opinion grew out of his sense of the large and dangerous gap between the electorate's half-formed and unreasoning perception of public affairs and the momentous decisions democratic politics required of it. The media only partially served to span this gap and as often as not failed to do so. In a sense, Lippmann's entire career as a journalist was an effort to bring this public world into the clear view of the private individual. Though Blum does not go so far, we might see Lippmann's philosophical books as ruminations on his own failure and that of his fellow professionals to achieve this ambitious goal.

Blum's argument is complex, full of acute insights into the texture of Lippmann's thought but in the end not fully convincing. He is surely right to protest that there is no simple transition from liberal youth to conservatism old age. Indeed Blum substantiates his

claim that the categories of liberalism and conservatism are of questionable use in characterizing Lippmann's thought. The question is whether Blum's term "cosmopolitanism" adequately describes the distinctive, *stil generis* quality of Lippmann's mind. On balance the answer must be no. Sensitive as he was to the dangers of imposing a false unity on Lippmann's thought, he does fall into this trap in part because he tries to make Lippmann's books carry an interpretive burden which on their own terms (with the possible exception of *Public Opinion*) they cannot bear. This is not to belittle the philosophical books, merely to state that they are inseparable from Lippmann's career as a peculiarly reflective daily journalist. Indirectly Blum bears out this judgement in his superb final chapter entitled "Political Philosophy and the Fourth Estate", in which he reintegrates the two Lippmanns, showing in effect that there was only one - a rare combination of speculative thinker and chronicler of our times.

Richard Crockatt

Richard Crockatt is lecturer in history at the University of East Anglia.

Separate tables

The Turning Point: Roosevelt, Stalin, Churchill, and Chiang Kai-Shek, 1943: The Moscow, Cairo and Tehran Conferences
by Keith Sainsbury
Oxford University Press, £17.50
ISBN 0 192 15858 9

When, on July 10, 1943, Anglo-American forces began landing in Sicily, Britain's strategic and political star still seemed to be in the ascendant. No third party serious of threatening to intrude upon the political intimacy between Churchill and Roosevelt, now almost four years old, which had helped her to exercise a more than proportionate influence on allied political counsels; and proof of that influence was her success in urging a further continuance of the Mediterranean strategy upon her reluctant American partner - albeit a success purchased at the price of having to agree to an invasion of north-west Europe in the spring of 1944. Within five months the alignment of the Grand Alliance had swung decisively against her. Its main axis now ran directly from Washington to Moscow, and China was admitted as an equal - or at any rate a near-equal - to the table of the great. The inter-allied conferences at Moscow, Cairo and Tehran which took place between the end of October and the beginning of December 1943, and at which a number of changes in the shape of the alliance were registered, have been labelled "the most significant in the war". A close analysis of their content has been long overdue.

The three principals were not present at Moscow. Instead they were represented by their foreign ministers. Two of these three gained their main objectives. Cordell Hull, the American secretary of state, felt well pleased with the outcome: "As I boarded the plane for home," he wrote later, "I felt very strongly that great things had been accomplished at Moscow". The reason for his satisfaction was Russia's signature to the Four Power Declaration which bound her to cooperate with America, Britain and China for

postwar peace and security and set out the bones of what was to become the United Nations, with the four signatories acting as the world's policemen. Hull also had an unexpected bonus in his pocket in the shape of an undertaking which closed the conference, to join the war against Japan once the Axis powers in Europe had been defeated. Molotov was given firm confirmation of the Allied commitment to an invasion of Europe in the spring of 1944. Anthony Eden, however, had failed in all three of his major objectives: to foster the creation of federations of states in eastern Europe, to secure a joint declaration against spheres of influence and to get an undertaking from Russia and America not to make separate agreements with third parties.

Hull had artfully avoided meeting Eden before he arrived at Moscow. Roosevelt - having evaded an American torpedo while steaming across the Atlantic in the USS Iowa - equally artfully avoided Churchill's attempts to secure a bi-polar meeting before arriving at Cairo, where the Russian and the Chinese were waiting. At the Cairo conference the battle lines were drawn. Churchill, frustrated at the slow progress being made in Italy and scenting opportunities in the Aegean and the Adriatic, began his fight to renegotiate the OVERLORD timetable in order to retain men and landing-craft for further Mediterranean operations instead of releasing them to train and prepare for the Normandy landings. Roosevelt, with his eye firmly on the postwar world and the four policemen, backed a major amphibious operation in Burma against British wishes in order to win political credit with Chiang Kai-Shek. Anglo-American strategic differences were transported to Tehran, where Roosevelt offered Stalin the choice between OVERLORD and expanding operations in Italy. Unhesitatingly, Stalin chose the Normandy landing.

Britain left Tehran with a political failure to set alongside her strategic failure - although some months were to pass before Churchill finally gave up the struggle and accepted the inevitability of the Normandy landing. Eden's attempt at Moscow to preserve the eastern European states by seeking to encourage federation took two severe blows when Roosevelt privately told Stalin that he would accept a general westward shift of Poland's frontiers after the war, and also when he indicated that he expected to see American land forces out of Europe soon after the war's end. Averell Harriman had won the President's ear at the start of the Tehran conference that unless he dealt with Poland there "its fate would probably go by default". In essentials he was quite right.

Keith Sainsbury's careful narrative, rooted in the published American and Russian documents and the unpublished British records, charts these events with scrupulous care. His explanation of why the United States deserted Britain for Russia rests chiefly on Roosevelt's need for and faith in Russian cooperation in bringing about his vision of the postwar world order. But FDR was rather more than a starry-eyed idealist, and it is worth pointing out that he went to the Cairo conference armed with a comprehensive list of the territories which the United States needed to control in order to provide for its own security around the globe. Perhaps Stalin also had such a list. Churchill apparently did not, and this made a weak hand all the weaker.

John Gooch

Dr Gooch is reader in history at the University of Lancaster.



Stalin and Roosevelt at the Tehran conference

Liking Ike

Eisenhower, the President
volumes two: 1952-1969
by Stephen E. Ambrose
Allen & Unwin, £15.00
ISBN 0 04 923075 1

Professional soldiers are reputed to make poor politicians. High military rank can insulate officers from the necessity of compromise and fine tuning that is integral to political life. The cataclysmic solutions of warfare for which officers are trained are usually inappropriate to the delicate footstep of domestic and international politics. Such conventional wisdom, however, does not fit the bill in the case of Dwight Eisenhower. He managed to combine the authority of soldiery with a personal modesty and sense of self-restraint.

Stephen Ambrose's exhaustive study of Eisenhower's presidency, the second volume in his authoritative biography, portrays a man who was at once determined, judicious and humane. He did not suffer from the arrogance that can come so easily in high office, an arrogance that he identified in his vice-president, Richard Nixon. Eisenhower was tolerant and liked to hear all sides of an argument. He did find it difficult to get rid of those loyal to him but, unlike Nixon in the 1970s, he could brook criticism of his management of public affairs. Indeed Eisenhower showed

more anger over revelations that he had overruled a trout river than over criticism of his ambivalence on racial segregation.

On some issues his admirable ability to appreciate a wide spectrum of opinion resulted in some embarrassing fence-sitting - for example, on McCarthy's histrionics and school desegregation. But in the end he always made up his mind, got his own way and, to crown it, did the decent thing. Ambrose is at times over-defensive and lenient. McCarthy revolted the President; yet Ambrose invokes without comment Eisenhower's consistent refusal to condemn the witch-hunt. Eisenhower described his strategy as one "to avoid public mention of any name unless it can be done with favourable intent and connotation; reserve all criticisms for the private conference; speak only good in public." "I do not always speak for myself," Eisenhower was motivated as much by a desire for comfort as by prudence. It is good to know that Ike had qualms, but J. Robert Oppenheimer still lost his job and the Rosenbergs lost their lives.

In foreign policy Ike achieved everything he set out to achieve. He remained master in his house and thankfully injected some sanity into the trigger-happy advice he received from Secretary of State Dulles and Admiral Radford of the Joint Chiefs of Staff. In both the Quemoy/Matsu and Indochina crises, Eisenhower was advised to use atomic bombs to achieve American objectives. In Indochina he even had to put a halt to commitments to France to drop two or three atomic bombs on Vietnam positions.

believed if gains were to be made in the cold war, they would be achieved through aggressive covert operations, such as those successfully staged in Iran and Guatemala. Ike was never comfortable with brinkmanship. Ambrose's sympathetic and definitive study reveals a man who could command and listen.

Through Eisenhower Ambrose has captured the daily dramas and routine of White House life and has achieved something quite special in biography - the reconstruction of his subject.

Robert Garson

Dr Garson is lecturer in American studies at the University of Keele.

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BOOKS

ENVIRONMENTAL SCIENCES

Point of no return

Ecology of Natural Resources
by François Ramade
Wiley, £34.00 and £14.95
ISBN 0 471 90104 0 and 90625 5

In the late 1960s and early 1970s, the groundswell of concern about the environmental state of the world was made manifest in a number of well-known publications such as *The Ecologist's* "Blueprint for survival" and the Club of Rome's *The Limits to Growth*. Subsequently, there have been some further more sober reviews such as United Nations Environment Programme publications, *The World Environment 1972-1982* and *Global Environmental Issues*, and more substantial pleas for a major shift in our management of resources contained in the Brundt Report and the International Union for the Conservation of Nature's "World conservation strategy".

Perhaps the conspicuous lack of any major changes of direction in international politics, economics and trade towards those advocated in these books is less surprising than the apparent quietening of concern. Is this lower level of anxiety due to us getting used to the idea of hurrying towards our doom, even exhilarated by the thought of the increased speed of approach? Is it because the urgency of the nuclear issue overshadows everything, including longer-term environmental imperatives? Or is it because we have become fatalistic in our view of the future?

François Ramade's book is a reminder

der that the urgent issues of a decade and more ago have not simply gone away, as they would if they were a passing fashion. Indeed, the screw has tightened and we are reminded that options for the rational use of natural resources are continuing to be rapidly foreclosed. The notion that negative feedback mechanisms will ensure that over-exploited ecological systems will return to their former equilibria when the pressure is relaxed is a comfortable one for ecologists. However, there is mounting evidence, including plenty in this book, that this is not so beyond a certain point. There seem to be thresholds beyond which there is no possibility of immediate return and some new, less productive, equilibrium is attained. For example, the forests of most Mediterranean lands have been replaced by heavily eroded hillsides and mountainsides; since the spectacular decline of the Peruvian anchoveta fishery from 1971, there has been no recovery; and in the Sudan part of the Sahel, the desert has advanced 90 kilometres in 20 years. Once productive ecosystems are becoming less so in parallel with a rising world population. How many more Ethiopians may we expect before the end of the century and with what consequences?

This volume draws attention to the fact that the whole range of natural resources available to man is being approached generally in a more or less profligate manner. The strong judgements which Ramade delivers, however, made in a sober way and from the basis of sound science. This book purports to be "for all those interested in ecology, environmental science and conservation issues, whether student, professional or interested layman". When I read this, I became suspicious - in that most such claims are impossible to fulfil. And when equations began to appear on page five, I felt my prejudices about to be confirmed. However, the mathematics introduced is the minimum necessary for understanding basic ecological principles; and after chapter one, the layman should not be troubled. As a text for first-year undergraduates in the environmental sciences, it should

be a most stimulating read; for the professional it is a useful update on resource questions; and I found it most absorbing in the subject areas I know least about.

Following an outline of ecological principles, the chapters deal in turn with energy and mineral resources, the atmosphere and climates, the hydro-sphere, agricultural ecosystems and food production, forests and woodlands, natural rangelands, and the protection of threatened ecosystems. The approach is fundamentally ecological but with proper attention to the physics and chemistry of the Earth, oceans and atmosphere.

I was glad to be sharply and convincingly reminded that the economic imperatives which the activity of nations at present obey will soon be overtaken by ecological imperatives with quite devastating results. How these will affect human systems in the twenty-first century is speculation in which this book does not indulge.

John Barkham

John Barkham is senior lecturer in environmental sciences at the University of East Anglia.

Earth scan

Images of Earth
by Peter Francis and Pat Jones
George Philip, £12.95
ISBN 0 540 01083 9

Remote sensing, the technique by which electromagnetic radiation sensors are used to record images of the environment for later interpretation, is one of the most rapidly growing fields of science in Britain. It began over a century ago with the use of aerial photography and gained prominence in the 1960s when photographs were taken of the Earth's surface during America's race to the Moon. Photographs from space were recorded from the mid-1960s by Mercury, Gemini and Apollo in the 1960s. Skylab in the 1970s, and the Space Shuttle in the 1980s.

The successful application of the earlier photographs paved the way for the launch of unmanned, Earth resources satellites, the most important of which have been America's Landsat satellites; five were launched between 1972 and 1984 with two more planned for 1988 and 1991. These carry two sensors, at least one of which is an electromagnetic scanner: a device which records radiation reflected from the Earth's surface as the satellite moves forward. These numerical data are transmitted to receiving stations around the globe, where they can be processed to provide information of value to geologists, agriculturalists, planners and many other people with an interest in the Earth's resources. The first three Landsats carried a multispectral scanning system which



A plunging anticline, from the seventh edition of F. G. H. Blyth and M. H. de Freitas's *A Geology for Engineers* (Edward Arnold, £16.50).

recorded images in four wavebands, at a ground resolution of 79 metres, for almost everywhere on the planet, each every 18 days. Current Landsats have the same sensor but in addition carry a thematic mapper sensor which records images in seven wavebands, at a ground resolution of 30 metres, for almost everywhere on the planet, now every 16 days.

These two types of imagery give us two very different views of the world. The often oblique photography, taken from manned satellites at irregular intervals and at a range of scales provides us with visually unique and often exciting snapshots of our hazy planet. The vertical imagery, taken from Landsat satellites regularly and at a fixed scale, are the product of a regular monitoring programme - what they lack in immediacy is more than compensated by their clarity and spatial detail.

Faced with the task of using images from these two different sources to capture the imagination of the reader, some writers have presented good quality imagery with factual captions; others have used imagery as illustrations for their text. Combining the best of these approaches, Peter Francis and Pat Jones have used generally good quality imagery - of the 80 images only 6 were poor and 22 were excellent - in conjunction with easily readable maps and a journalistic style of text. The images they present are grouped under various themes: history, man, environment, geology and the atmosphere. Forty per cent of the images are from the Landsat sensors - one in five of these from the newer, thematic mapper sensor. Of the other 60 per cent one in nine are derived from photographs taken from the satellites Gemini, Apollo and Skylab, with the

remainder being taken from the Space Shuttle.

Although my sensitivity to breathing views from space is somewhat numbed by seeing them every day, I found many of these images to be both spectacular and fascinating. Spectacular are the images of the glorious Scottish Highlands in the spring of 1977; the barrenness of the Atacama desert; the loneliness of Midway atoll; the vastness of the Arctic region; and the sharp contrast between field sizes in the Soviet Union and China. Fascinating are the images of places in the news: the industrial sprawl around the Gdansk shipyards; the vulnerability of Hong Kong; the flocks of superflares and swirls of oil in the Gulf; and the varied terrain of Nicaragua.

This is certainly a very slick book that deserves a wide and careful viewing. I'm not sure, however, about a wide and careful reading, at least in the more technical sections, where there are rather too many errors for my liking. For example, when discussing the Landsat satellites, incorrect information is given on both their altitude and timing and on the wavebands and spatial resolving power of their sensors. There is also a notable vagueness about reconnaissance and European satellite systems.

Of the many advances made by remote sensing, perhaps one of the most important has been its role in changing the way in which man perceives his environment. The view of our Earth from space has made us aware of its fragility, its beauty and man's impact upon it. This is certainly an excellent book for those who wish to share in this new view.

Paul Curran

Paul Curran is lecturer in geography at the University of Sheffield.

Ancient wetlands

The Archaeology of Wetlands
by John Coles
Edinburgh University Press,
£11.00 and £5.50
ISBN 0 85224 489 4 and 503 3

Archaeologists have recently been paying more than usual attention to wetland sites. There are two main reasons for this: almost everywhere

are under threat and archaeology, as well as wildlife, suffers in the process. Archaeology, however, is a non-renewable resource: we cannot re-establish sites once they have been destroyed; and the process of destruction, once started, is frequently unstoppable. Second, wetlands allow the preservation of organic material within their waterlogged, anaerobic environments. The result of this is that the often rather dreary inventory of material from dry sites - pottery, stone, metal - is augmented by objects of wood, cloth, leather, wax, paper, and fibre. Our understanding of the range of ancient material culture is thus vastly enlarged.

If wetland sites offer more to the archaeologist than their dryland equivalents, they are also far more expensive and technically difficult to dig. Happily the author of this short book is well equipped to steer the reader through this maze of complexity, as for the past 20 years he has directed a major series of wetland excavations in the peats of the Somerset Levels. During this period he has also maintained an active interest in European wetland research, and his Canadian background has enabled him to keep abreast of similar work in North America. For its size (about 110 pages), this book is extraordinarily comprehensive.

After a general introduction to the different types of wetland (fen, bog, marsh and so on) the author provides a lightning tour through the variety of finds and sites that have been excavated to date - leaving the impression that archaeologists of the wetlands know more about the past than the present. Problems of dating, for example, are enormously simplified by the widespread use of dendrochronology, a tree-ring technique that allows the dating of events to specific years. Dendrochronology makes radiocarbon dating, the dates from which are expressed in uncertainty ranges of decades or centuries, seem like a very blunt instrument indeed. A chapter on methods covers techni-

ques of excavation, conservation and recording. Although on the face of it this topic might better have been placed in an archaeological textbook, the treatment is light and the subject-matter fascinating, as wetland archaeology is still in its infancy. Techniques are developed to meet specific problems in a variety of ways that often mirror other national characteristics: the Swiss, the Dutch and the Germans, for example, pour money and expertise into their remarkable sites, while in Britain, where the sites are just as good, we do our inventive best with resources that are pitifully small.

The book concludes with a general assessment of the potential of wetland archaeology and lays great emphasis on the fragility of its sites and the impending doom; it is concise, well edited and superbly illustrated. It should be read by everyone with an interest in the past - and a concern for its future.

Francis Pryor

Francis Pryor is director of Fenland Archaeological Associates, Wisbech St Mary.

A fourth edition of G. M. Bennison's *An Introduction to Geological Structures and Maps* has been published by Edward Arnold at £2.95.

BOOKS

ENVIRONMENTAL SCIENCES

Farming patterns

An Introduction to Agricultural Geography
by David Grigg
Hutchinson, £12.95 and £6.95
ISBN 0 09 156710 6 and 156711 4

Geographers are revising their approach to the study of agriculture. Increasingly, explanations of agricultural patterns are being sought in the wider economic and political processes that influence the general development of the industry, rather than from detailed analyses of farming activities *in situ*. Many of the debates of greatest interest concern the relations between farming and other economic activities and not the pattern of farming itself. Unfortunately, by adopting a conventional outlook on the study of agricultural geography, Professor Grigg fails to do justice to this changing outlook. And although he empha-

sizes, quite correctly, the heterogeneity of agriculture and the need to consider many possible explanations for farming patterns, he fails to provide the reader with any clear direction as to what area of study might be most fruitful or how to approach the immense range of material included in his book.

The book is divided into three sections. In the first, five chapters cover the economic environment, consisting of the demand for agricultural products, the allocation of resources, markets and methods of transportation, population density and agricultural practice, and farming close to cities. The natural environment acts as the focus of attention in the second, with chapters on the biology of agriculture, climate, topography, and soils. The last four topics introduced include a discussion of agricultural policy, the diffusion of agricultural innovations, farm size and landownership, and the cultural framework of farming.

The text is well written, but in its attempt to cover such a wide range of material and, laudably, to include numerous world-wide examples, it becomes thin and lacking in argument. The main exception is the discussion of population change in which the author draws on his acknowledged expertise and writes at his best. Elsewhere, the uninformative reader may be bewildered by the brevity of treatment of some issues, while the informed may wonder why some topics have been largely omitted. Why should the cultural framework, for example, emphasize

ers pertinent theory, presents a planning and management strategy, and develops general and site planning guidelines. Detailed examples are drawn from Great Britain, Japan, Canada and the United States.

However, the book is a great disappointment. The writing is tired and repetitive and is weighed down with long undigested lists - such as the 22 "Ecological functions and human uses of ESAs" or the 42 "Technical principles of environmental management". The book is also much narrower than its title might imply. In fact it is restricted to the role of local government in the planning and management of natural areas. This greatly limits its scope and utility, as the vast wealth of experience in the management of natural areas is with national or provincial agencies.

Chapter two provides a base for environmental planning in ecological theory, and outlines some of E. P. Odum's views on ecosystems and the theory of island biogeography. All this is presented as so much received wisdom, with little exposition of the concepts and no indication that there is considerable disagreement and debate among ecologists about such key matters as the interpretation of plant and animal succession, the relationship between diversity and stability, and the implications of island biogeography theory. The author certainly fails to demonstrate his claim that "the derived principles from ecology provide a theoretical base for the need, the function and the management of ESAs".

The book's biggest shortcoming is its failure to address the threats which ESAs face. The author declares himself to be an adherent to "ecological determinism" by which he means "a particular point of view in planning which advocates that retention of natural elements and processes should be given priority in planning". This laudable sentiment then seems to excuse him from considering the alternative uses of ESAs, whether they be for residential development, recreation, mining, afforestation or agriculture.

He therefore ducks all the crucial choices that a planning or conservation authority has to make and neglects the political conflicts and controversies which usually surround such a decision.

Philip Lowe

Philip Lowe is lecturer in countryside planning at University College London.

A collection of essays on *Planning and Urban Growth in Southern Europe* has been edited by Martin Wynn and published by Mansell at £20.00. The countries examined are Greece, Italy, Portugal, Spain and Turkey.

A collection of essays on *The City in Cultural Context* has been edited by John Agnew, John Mercer and David Sothar, and published by Allen & Unwin at £18.00 and £8.95.

Saturn's rings

Planetary Rings
edited by Richard Greenberg
and Andr e Brah c
University of Arizona Press, \$35.00
ISBN 0 8165 0828 3

It was in 1656 that Christiaan Huygens realized that the strange appearance of the planet Saturn, as seen by the telescopes of the day, might be explained by assuming that the planet was surrounded by an annular ring lying in its equatorial plane. Huygens' concept of the rings as a relatively thick, rigid body was soon called into question for a number of reasons related to its appearance and within a decade the idea that the ring might consist of a large number of small satellite bodies, each describing an orbit around Saturn as a separate individual, had become well established.

This concept, which soon spread to other areas of astronomy and cosmology, seems to have influenced the thinking of Immanuel Kant and others on the structure of the Milky Way. They saw it as the projection on to the sky of the disc-like structure defined by the orbits of stars in our own galaxy. Attention returned to the Solar System in the late eighteenth century with Pierre-Simon Laplace's formulation of his "nebular hypothesis" of the origin of the planets, and the discovery of the asteroids, a series of small bodies forming a "ring" around the Sun, mainly in the region between Mars and Jupiter.

Until the late 1970s, the rings of Saturn were the only known examples of planetary rings, and as such were regarded by theoreticians as representing a special example of the general process of formation of planar systems of bodies separately orbiting about a well-defined point. Studies of the motions of, and collisions between, the separate bodies proved to be relevant to many aspects of both fluid mechanics and gravitational perturbation theory. As long as detailed ideas on the origin and evolution of the rings of Saturn were lacking, it was not clear whether they could be regarded as being typical of any particular process or not.

This situation changed dramatically in 1977 when a ring system was detected around Uranus. The discovery was made by observing the apparent reduction in brightness of a distant

star as Uranus passed between it and the Earth; minor occultations due to the rings could be seen as well as the major effect due to the planet. It transpired that the structure of the system was substantially different from that of Saturn, consisting of nine relatively narrow rings, in contrast with Saturn's system of three broad rings (and numerous more subtle features). This observation in itself served to give a massive stimulus to considerations of the origin and evolution of planetary rings, and it was closely followed by yet more discoveries.

During the year before the detection of the Uranus rings, the probe Pioneer 10 had flown past Jupiter. Some of its measurements showed that charged atomic particles were being absorbed in space near the planet, and the existence of a ring system (with which the particles would collide) was suggested, although the idea received little support at the time. Only when the Voyager 1 and 2 probes passed by Jupiter in 1979 was the ring system confirmed by a series of images which showed a single, thin, narrow ring marking the outer edge of a thicker, doughnut-shaped region occupied by less-tightly crowded particles. The Voyager probes moved on to Saturn in 1980 and 1981, revealing an enormous amount of detail about the orbital dynamics, ranges of sizes and possible compositions of the ring particles.

Planetary Rings contains 19 contributions, representing a wide-ranging synthesis of observations and theoretical considerations of all the planetary rings systems so far detected, and forms an excellent reference work for specialists in this area. Of particular interest are sections reviewing as yet unsolved problems of ring dynamics, and space is also devoted to previewing the kinds of measurements that will be made when Voyager 2 encounters first Uranus (in January, 1986) and then Neptune (in August, 1989). Earth-based measurements are slowly continuing to improve our knowledge of the Uranus system, and have so far failed to detect significant rings around Neptune. We do not have too long to wait to see what fresh surprises Voyager 2's measurements may bring.

Lionel Wilson

Lionel Wilson is senior lecturer in environmental sciences at the University of Lancaster.

A paperback edition of R. J. Johnston's *City and Society: an outline for urban geography* has been published by Hutchinson at £5.95.

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BOOKS

ENVIRONMENTAL SCIENCES

Final frontier

Spacelab: research in Earth orbit by David Shapland and Michael Rycroft. Cambridge University Press, £11.95 ISBN 0521 260779

The space shuttle programme devised by the National Aeronautics and Space Administration (NASA) extends the original goal of space exploration to space exploitation. The shuttle has already been used to launch other spacecraft into Earth orbit for scientific and military observations of our own environment and the planets and stars that surround us. In addition, it provides a viable alternative to conventional vehicles for launching the increasing number of orbiting satellites used in telephone communications and television broadcasts.

Major hindrances to the scientific experiments carried out during previous shuttle flights have included the restrictions on space and weight, and the limited electrical power available to operate the equipment. In the past, it has been necessary to miniaturize Earth-bound laboratory experiments for their application in space. Now with the massive launch capabilities of the shuttle, it is possible to carry out large experiments in a custom-built module called Spacelab - Europe's major contribution to NASA's shuttle programme. This excellently written and illustrated book describes the 12-year programme of Spacelab's development and sets out the opportunities now possible in space research from Earth orbit.

Spacelab is capable of transporting large volumes of equipment; it can provide the large electrical power, thermal control and computer systems necessary for operating experiments; and it can accommodate the personnel needed to oversee all this and to repair any malfunction. Not only is it well equipped, it is also larger than any of the Apollo capsules involved in the famous moon missions. Though not a spacecraft itself, it is a reusable and versatile unit that can be carried in the shuttle cargo bay.

Spacelab consists of two elements - the module and pallet - the individual sizes of which may be adjusted to suit the requirements of a particular mission. The module is cylindrical with a diameter of four metres, a long configuration of seven metres and a short configuration of 4.3 metres. The crew reach the module from the shuttle orbiter cabin through a tunnel one meter in diameter. Both the tunnel and the module are kept at a pleasant temperature that enables the crew to work in "shirt sleeves", as on Earth.

It was in 1969 that the European Space Agency (ESA) accepted NASA's invitation to participate in their concept of an advanced Space Transportation System. ESA chose Spacelab, a manned orbital laboratory as its unique contribution to this new space adventure. However, although the final design was put forward in 1973, it was not until 1982 that the first module was delivered to NASA. Then on November 28, 1983, the first mission was launched, with Columbia carrying the Spacelab in its cargo bay on the ninth shuttle flight. During a historic flight of more than ten days, a total of 166 orbits of the Earth was completed.

The first flight was truly international, with a total of 71 experiments from Europe, 13 from the United States, one from Japan, but only three from Britain. The range of experiments was greater than ever before, including studies of the ultraviolet and X-ray radiation sources of the universe; measurements of the Sun's energy output; studies of the environment around the shuttle and of the composition and motions of the atmosphere; and the demonstration of advanced

electronic systems for studying the Earth's surface. Other experiments investigated the effects of microgravity on solids, liquids and vapours and crystal growth, friction, human physiology, and other biological systems. A total of six crew members were aboard Columbia for this mission, two of them the first in a new breed of scientist-astronauts chosen for their scientific skills and abilities in operating the experiments on board Spacelab.

The project is, of course, the most expensive space programme ever carried out by Europe - at a total cost of \$800 million. All ESA's member states, except Sweden, decided to participate; and then Austria, an associate member, agreed to contribute. The contribution from Britain is 6.5 per cent, compared with 54.9 per cent from Germany, 15.6 per cent from Italy and 10.3 per cent from France. Although the German company MBB-ERNO was the prime industrial contractor, British Aerospace is now making a significant contribution.

For Europe, Spacelab is not only a successful mission: it represents our first step into manned space activities and it presents unique opportunities

for the future industrial exploitation of space. Already, plans are being made for the missions that will take us through to the year 2000. In the next few years, we will see the shuttle being used as a major launch facility for Space Telescope and the Galileo mission to Jupiter; and there are exciting plans for the Cassini mission to Saturn and Titan. As an extension of Spacelab, the Space Station is now being developed as a permanent manned space environment for science and industry. The advantages of such a station lie in the increased time which man can spend in the space environment, and the capability of operating large apparatus with the support of larger power supplies.

Europe has considerable interest, ability and the will to utilize the capabilities of space. The success of Spacelab, so excellently presented in this book, should be an inspiration for future missions involving international collaborations.

Garry Hunt

Garry Hunt is director of the Centre for Remote Sensing at Imperial College, London.

Changing fortunes

Western Europe: geographical perspectives

by Hugh Clout, Mark Blackwell, Russell King and David Pinder. Longman, £7.95 ISBN 0582 300606

Rather arrogantly and perhaps unwisely, many contemporary geographers have abandoned regional geography as sterile and limited. How ill-advised such an attitude has been is amply reflected in this study of western Europe by four of British geography's leading "Europeans". Western is used, however, in a political rather than a truly geographical sense - all the 18 states treated are outside the socialist bloc.

This slender volume contains a remarkable wealth of material and lives up to its description as an "up-to-date and comprehensive book... carefully designed to provide geography students with a fundamental text on Western Europe". It is indeed a "selection of themes which are vital for understanding the human geography of Western Europe". Most notable are

the dilemmas of population policies in social and economic change and the challenge of agricultural and industrial adjustment to a world in recession.

The emphasis is on the common characteristics and the shared problems of the 18 states rather than on their individuality. True to their discipline, the authors concentrate on change and are at pains to recognize the spatial variation in such common characteristics and shared problems. This is well reflected in the consideration of how individual countries have faced such matters as urban renewal and housing, and is a useful corrective to the sweeping generalizations so often seen in print.

After the prosperous and ebullient 1960s, when confidence abounded in things being even better in the future, Europe has plunged into a painful recession, requiring fundamental economic and social readjustment. Primarily change has come as Europe has had to adjust to a world radically altered by the energy crisis of 1973, but it has also been exacerbated by the enlargement of the European Economic Community. Although we may claim we know all this already, the book guides us through the detailed geographical significance - at local and national level, of the nature and extent of change - shown, for example, in the chapter on energy discussing the major shift between coal and oil and the

subsequent implications for economic geography.

The book sketches the first traces of a new geographical pattern which has begun to emerge through closer international integration and highlights the challenges and strains this puts on the fragile unity of the EEC in absorbing new southern European members (Greece, Spain and Portugal) of quite different economic order from the original six and the "new boys" of the 1973 enlargement (Britain, Denmark and Ireland). The picture painted is indeed a melancholy one, in which even a regional review finds few if any bright spots on the map. Falling birth rates and an ageing population, even allowing for some encouraging difference from one part to another, suggest a multitude of social and economic difficulties ahead. When these demographic issues are compounded with Europe's problems in an energy-hungry world, in which North Sea oil pales significantly, and the many declining districts of older industries, the future looks sadly bleak. As we read of our demographic and economic decline in the world, the authors hasten to add an examination of how we are slowly devastating our continent environmentally. Although they draw no formal conclusion, the need for concerted "Euro-action" stands out throughout the text.

There are some disappointing omissions: although oil refining, petrochemicals and the motor vehicle industry are covered (the latter albeit rather patchily), the dilemmas of iron and steel-making are not mentioned. This industry's locational problems a scenario of changing technology and transport would have provided a good geographical case-study. The most serious omission is the lack of any direct reference to the rapidly altering patterns and problems of transport, so often cause and effect of changes in other spheres. What has been the impact of EEC policy to enhance mobility? What effects have the differing national policies towards investment in road and rail haulage had? What about the influence of large bulk carriers on ports and industries? And what about the increase in ferry traffic and the continuing debate about the Channel Tunnel?

It is a pity, also, that trade. Europe's life blood - gets no separate treatment, particularly its role in relations with the "other Europe" of the socialist bloc. Even so, this remains an excellent overall treatment, both as a textbook and as a reference source.

R. E. H. Mellor

R. E. H. Mellor is professor of geography at the University of Aberdeen.

Planning problems

An Introduction to Urban Geography

by John R. Short. Routledge & Kegan Paul, £16.95 and £8.95 ISBN 07100 03721 and 07100 98928. Planning the Urban Region: a comparative study of policies and organizations. by Peter Self. Allen & Unwin, £12.95 and £5.95 ISBN 004 3520987 and 352 099 5

Although these books have some common concerns, the former is a more general, cross-national, comparative analysis and the role of government - there, the similarities end. Short's book, one of the state of recent textbooks by British geographers on urban geography, is a well-structured, well-written text aimed primarily at first-year and second-year undergraduates.

Of the book's four sections, the central two are by far the most substantial. These sections deal first with an introduction to the three key themes of cross-national comparison, the consequences of redistribution in urban areas and the role of government, to which is added a succinct historical perspective on phases of urban growth. Second, urban systems are addressed in terms of economic development, urban dynamics and urban management. Third, the internal structure of the city is viewed through work, residence, movement, investment and politics. Finally, Short considers people's perceptions of urban environments and presents a view of the city as an ecological system.

This is a concise, well-presented and extremely readable textbook which draws on literature extending beyond the narrower geographical perspective. Such a wider view reflects a situation in which the study of public policy in geography has traditionally been weak but is increasingly recognized as vital to any serious understanding of the urban environment. The text is greatly aided by a well-selected range of diagrams, maps and tables. It also contains an unusual system of insets, separate from the main text, dealing with specific concepts or models, current issues within urban geography, techniques of statistical measurement, or alternative explanations and values. I found this a refreshing device and a particularly helpful aid to understanding. The book deserves to be widely read by students of the urban environment.

Short draws attention to the major planning problems faced by governments in managing very large urban areas, where increasing size can lead to costs increasing to outweigh the benefits of the urban environment, a theme developed at greater length in Self's book. Based on revised and expanded versions of a series of invited lectures at the University of Alabama in 1978, the book presents traditional theories about the nature of urban development and planning interventions. Self also considers planning and management in metropolitan areas, from the city itself, the organs of metropolitan government, and the role of central government. In a concluding essay, he examines the scope of planning and its future in relation to the organization of the government of metropolitan areas, arguing that it is, at a political and organizational crossroads. He suggests the need for a new, enlarged, elected regional urban institutions of government, covering wider areas, with a

range of different powers including some currently exercised by central government. A far cry from the view of the present government that increased centralization is the key.

The book is based on studies of metropolitan government throughout western Europe, North America and Australia, with occasional references to other countries, and is set within the historic period since World War II. Self identifies three phases of national urban policy: first, a diversion of new growth from large cities to depressed areas; second, attempts to coordinate economic development and regional urban policies; and third, a concern with cities as problem areas and as locations which compete for scarce governmental aid. He argues that regional planning and metropolitan coordination are intrinsically difficult tasks for governments, that national programmes have been developed but have suffered because of uncoordinated policies, and that by 1980 policies for urban areas in many regions had become very confused.

Given the present Government's plan to abolish the Greater London Council and the metropolitan counties (though not the Scottish regions), this book contributes to a wider understanding of the issues involved. The present hastily developed proposals of abolition merely add to the state of confusion identified by Self. Future of local government organization in Britain, however, needs a wider, more dispassionate review.

Kenneth Spencer

Kenneth Spencer is an associate director of the Institute of Local Government Studies at the University of Birmingham.

BOOKS

ENVIRONMENTAL SCIENCES

Whaling outpost

The Island of South Georgia by Robert Headland. Cambridge University Press, £14.95 ISBN 0521 252741

Few people had heard of South Georgia and fewer still knew of its location and landscape until it exploded into the world's headlines during the Falkland's war of 1982. The island lies in a surprisingly high latitude for a glacier-covered island (about 54 degrees south) and its equivalent in the northern hemisphere is northern England. Since it lies north of latitude 60 degrees south, it does not qualify as part of British Antarctic Territory and is not covered by the Antarctic Treaty. Instead, it is part of the Falkland Islands Dependencies and at the moment is administered both by a civil commissioner and by a military commissioner.

Robert Headland is an enthusiast who has spent several years in South Georgia with the British Antarctic Survey. He was taken prisoner by the Argentine forces on April 3, 1982, but fortunately was released in time to complete this book. His deep interest in South Georgia and his detailed knowledge of its natural environment and history shines through in this comprehensive account of the island. Headland gives a clear and vivid



Migrants coming to America on board S. S. Westernland in 1890, from Philip Ogden's *Migration and Geographical Change* (Cambridge University Press, £7.50 and £3.95).

Hazard city

Geomorphological Hazards in Los Angeles: a study of slope and sediment problems in a metropolitan county. by R. U. Cooke. Allen & Unwin, £18.00 ISBN 004 05510903

A hazard is a perceived event which threatens both life and property: a disaster is the realization of this hazard. Very few cities are as disaster-prone as Los Angeles which, because of its numerous natural and human-induced hazards, has earned the title of Hazard City. The media have regularly alerted the world not only to its smog problem but also to the catastrophic earthquake predicted to occur at any moment.

Professor Cooke takes a less sensational and more authoritative look at a different group of threats, those of landslides, debris flow and flood, in which he highlights the very real conflicts which exist between the citizens and their distinctive semi-desert environment. His initial aim is to explain how slope failure, slope erosion and flooding are not simply determined by such physical factors as

impression of the island's scenery - likened to "the Alps in mid-ocean" or "the Himalayas seen from Simla". Although 170 kilometres long, South Georgia is only 14 kilometres wide near the centre in the immediate vicinity of snow-clad peaks soaring to nearly 3,000 metres. Glaciers extend to sea level along much of the windward south-western coast of the island, while there are tracts of ice-free ground on the sides of fjords on the south-eastern coast. The wildlife includes large numbers of seals, penguins, albatrosses and reindeer, which, combined with the distinctive tussock grass and spectacular mountain backdrops, provide a memorable panorama for visitors.

Headland brings together a wealth of archive material to present a fascinating account of the history of the island, illustrating the early discoveries with reproductions of early charts and apposite quotations. Thus, the reader learns of the visit of Captain James Cook to Possession Bay in 1775, when the island was claimed "in the name of his Britannic Majesty"; and of how Cape Disappointment was named, when it became clear that the island was not part of the fabled southern continent. There are also accounts of the nineteenth-century sealers, whose assault on the fur seal repeatedly reduced its numbers to near extinction.

The twentieth century saw South Georgia boom as a major world whaling centre. The first land station was established in 1904 by an Argentine company and continued to operate until 1960. Others were soon established in the early years of the century and the last survived until 1966. In addition, there were numerous floating factory ships. The vast majority of the whalers were Norwegian, a fact which accounts for the many Scandinavian names on the island. At the peak of whaling in the years up to 1930, there may have been 2,000 people involved in the industry at any one

time. Particularly interesting is the account of the whaling methods, the reconstructions of the whaling stations and the fine historical photographs. Headland also discusses the military activity in 1982. Here, although it is interesting to read the account of someone directly involved, the narrative is a robustly British view of the conflict. It would have been interesting to learn of the Argentine viewpoint.

Clearly the book is essential reading for any visitor to South Georgia, the number of which may well increase as the spectacular nature of the island becomes more widely appreciated; the details of the industrial archaeology, the ship wrecks and early expedition artefacts are all described. Headland's book is also of interest, however, to a wider readership, in part because of the accounts of the exploration, resource exploitation and conflict involving a remote sub-Antarctic island; and in part because of the way in which it illustrates the dangers of a loosely controlled exploitation of marine resources.

Fur seals and whales were hunted to near extinction, but it is encouraging that their numbers are now increasing and that they are protected. At the same time, however, fleets of fishing boats, mainly from Poland and the Soviet Union, have recently been catching large quantities of fish; and there are clear signs that the resource has been overfished and is in need of protection.

The experience of South Georgia is a salutary reminder of the dangers of untrammelled exploitation of resources - an important point to bear in mind during the negotiations for a replacement for the Antarctic Treaty which expires in 1991.

David Sugden

David Sugden is senior lecturer in geography at the University of Aberdeen.

storms between them have subsequently triggered catastrophic landslides and mudflows, endangering life and property not only in the mountains but also on the alluvial plains below.

The effects of five separate storm sequences between 1914 and 1978 are critically examined in the second section, which also traces how management responses have gradually become more organized and sophisticated. The study is based not only on a wealth of well-referenced archival material but also on interviews and extensive fieldwork. The third section concentrates on the behavioural responses to the disasters at individual, community and regional levels, and offers a valuable model linking the measures taken by a hierarchy of management agencies with the different geomorphic problems posed by the slopes and channels of Los Angeles. This section also discusses hazard prediction techniques and non-structural adjustments as insurance, disaster relief and zoning ordinances, in addition to an appraisal of various structural controls to alleviate the hazards. A short concluding section includes a cost-benefit review of the city's hazard problem.

Despite the claim that Los Angeles' environmental management programmes have much to teach other world cities, the author discovered that responsibility for hazard management was so disparate that no single agency had a full comprehension of the intricate relationships that exist between physical and human systems. Herein lies the strength of Professor Cooke's book, for he does understand their fundamental interaction. Moreover, he is able to explain the cause and effect patterns clearly and concisely. With its numerous maps and tables, a good bibliography and adequate index, the book is an extremely valuable addition to the growing literature of literature on urban hazards. It will appeal to many university geologists and geographers, while any urban planner or environmental manager would do well to read it and heed its message.

John Whitlow

John Whitlow is senior lecturer in geography at the University of Reading.

The proceedings of a symposium at the University of Reading in December, 1981, have been edited by Robert Foley and published as *Hominid Evolution and Community Ecology: prehistoric human adaptation in biological perspective* by Academic Press at £37.50.

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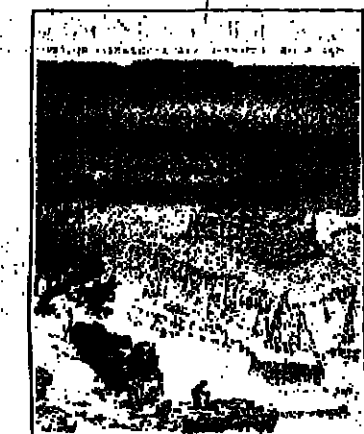
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(Limited Term)
Department of Education
The post will be held for a period of up to five years, to be filled as soon as possible after 1 January 1986.

LECTURER IN MINERAL PROCESSING
School of Mathematical and Physical Sciences
The appointment will develop and teach undergraduate and postgraduate courses in Mineral Processing.

LECTURER IN ELECTRONIC ENGINEERING
Applications are invited for a post of Lecturer in the Department of Electronic and Electrical Engineering. Applicants should be graduates with relevant qualifications and considerable experience in the field of electronic engineering, with particular reference to the design and analysis of electronic systems. The appointment will be on Grade IV of the national salary structure for Senior Library Staff. Copies of the Further Particulars for this appointment may be obtained from the University Secretary (C.V.U.) University of Surrey, Guildford, Surrey GU2 5XH, or by telephone, Guildford 571281, Ext. 633. Applications in the form of a curriculum vitae, together with the names and addresses of three referees, should be sent to the same address by 31 March 1986, quoting reference 354.

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The University of Melbourne READER/SENIOR LECTURER (continuing) in the CENTRE FOR THE STUDY OF HIGHER EDUCATION

Applications are invited from scholars with a significant record of achievement in research in a field of education or social science relevant to the study of higher education for a position of Reader or Senior Lecturer in the Centre for the Study of Higher Education. The successful applicant will be expected to have a research orientation and an interest in postgraduate work. Preference is given to applicants with a multidisciplinary background (preference for modern library/information technology and computing in one or more of the following fields: Information Science/Computer oriented studies; Indexing, Classification and Cataloguing; Non-book Materials. Applicants should state their area of specialisation.

Up to five full economy class passages plus baggage allowance up to US\$900 on appointment and normal termination. Special allowance up to US\$300 for shipment of academic books and teaching equipment on appointment. Unfurnished accommodation at 10% of salary to superannuation Scheme. Subsidised Health Service, Annual Book Grant, Annual Study and Travel Grant for self, spouse and three children. Transportation allowance to persons who own and operate a motor vehicle.

La Trobe University Melbourne
LECTURER IN ITALIAN STUDIES
(Fixed Term - 4 Years)
School of Humanities
The position is to be filled as soon as possible.

LECTURER IN ACCOUNTING
(Continuing or limited term)
Department of Accounting and Business Law
This position is to be filled as soon as possible.

LECTURER IN PREHISTORY
(Fixed Term - 4 Years)
Department of Education
The post will be held for a period of up to five years, to be filled as soon as possible after 1 January 1986.

LECTURER IN EDUCATIONAL PSYCHOLOGY
(The advertised)
(Limited Term)
Department of Education
The post will be held for a period of up to five years, to be filled as soon as possible after 1 January 1986.

LECTURER IN MINERAL PROCESSING
School of Mathematical and Physical Sciences
The appointment will develop and teach undergraduate and postgraduate courses in Mineral Processing.

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THE CITY UNIVERSITY Department of Aeronautics

Lectureship in Aerospace Structures

Applications are invited for a Lectureship in the Department of Aeronautics, commencing on or before 1 October 1985. Candidates should preferably be Chartered Engineers and have a higher degree in a relevant discipline together with appropriate industrial or research experience. They should have experience in the design and analysis of aerospace structures, in particular using finite element methods, and will be required to participate in teaching these topics to our undergraduate courses.

Experience of research into structural analysis using finite element methods, or computer aided design techniques will be an advantage.

The appointment will be for five years in the first instance. Salary will be on the scale 28,753-£16,156, including London Allowance.

Application forms and further information may be obtained from the Academic Registrar's Office, The City University, Northampton Square, London EC1N 4BT, telephone 5307.

Closing date: 15 March 1985 (02079)

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LOUGHBROUGH UNIVERSITY OF TECHNOLOGY

HALIFAX BUILDING SOCIETY RESEARCH FELLOWSHIP

Applications are invited for the newly established Halifax Building Society Research Fellowship for four years, to be held from 1 September 1985 to 31 August 1989. The person appointed will be a member of the Loughborough University Staff. The Fellowship is open to graduates with a degree in a relevant discipline and a research interest in the field of building research. The successful applicant will be expected to have a research orientation and an interest in postgraduate work. Preference is given to applicants with a multidisciplinary background (preference for modern library/information technology and computing in one or more of the following fields: Information Science/Computer oriented studies; Indexing, Classification and Cataloguing; Non-book Materials. Applicants should state their area of specialisation.

Up to five full economy class passages plus baggage allowance up to US\$900 on appointment and normal termination. Special allowance up to US\$300 for shipment of academic books and teaching equipment on appointment. Unfurnished accommodation at 10% of salary to superannuation Scheme. Subsidised Health Service, Annual Book Grant, Annual Study and Travel Grant for self, spouse and three children. Transportation allowance to persons who own and operate a motor vehicle.

La Trobe University Melbourne
LECTURER IN ITALIAN STUDIES
(Fixed Term - 4 Years)
School of Humanities
The position is to be filled as soon as possible.

LECTURER IN ACCOUNTING
(Continuing or limited term)
Department of Accounting and Business Law
This position is to be filled as soon as possible.

LECTURER IN PREHISTORY
(Fixed Term - 4 Years)
Department of Education
The post will be held for a period of up to five years, to be filled as soon as possible after 1 January 1986.

LECTURER IN EDUCATIONAL PSYCHOLOGY
(The advertised)
(Limited Term)
Department of Education
The post will be held for a period of up to five years, to be filled as soon as possible after 1 January 1986.

LECTURER IN MINERAL PROCESSING
School of Mathematical and Physical Sciences
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Universities continued

THE UNIVERSITY of Salford is to receive a £250,000 grant boost after stringent spending cuts.

The university responded to cuts by strengthening links with industry and commerce to aid research programmes. The new policy will further the appointment of nine extra academics and additional support staff.

Now the University Grants Committee has agreed to provide extra recurrent grant of £250,000 a year from 1985 "in recognition of the way in which task it was set in 1981"

University of East Anglia

LIBRARIAN

Applications are invited for the post of Librarian, in succession to Mr W.L. Gutterman, who retires in September 1985 after serving since the foundation of the University. Candidates should have wide experience in academic libraries and a proven record in the management of library operations. The appointment will be at an appropriate point on Grade IV of the Senior Library Staff scale (£18,070-£22,136).

Applications (five copies), giving full particulars of qualifications and experience, together with the names and addresses of three referees, may be made to the post of Librarian, University of East Anglia, Norwich NR4 7TJ (telephone 80181 ext. 220) from whom further particulars may be obtained. No form of application is issued. (02079)

Further details may be obtained from the Secretary and Registrar, The University, Southampton, SO9 5NH, to whom applications (10 copies from persons in the UK) should be sent before 23 March 1985. (02079)

University of Liverpool
Project on Current Policy in European Community
Applications are invited for the post of Research Assistant.

Research Assistant
The Research Assistant will be responsible for the collection and analysis of data for the project. The successful applicant will be expected to have a research orientation and an interest in postgraduate work. Preference is given to applicants with a multidisciplinary background (preference for modern library/information technology and computing in one or more of the following fields: Information Science/Computer oriented studies; Indexing, Classification and Cataloguing; Non-book Materials. Applicants should state their area of specialisation.

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LECTURER IN PREHISTORY
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University of Dundee

CHAIR OF PHYSICS

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(Fixed Term - 4 Years)
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NEW POSTS AT SALFORD

Applications are invited for the following new academic posts

CHAIR IN INORGANIC CHEMISTRY

The area of specialisation is Synthesis with reference to Co-ordination Chemistry of the Transition and Main Group elements. Candidates are expected to have an active and proven record of research in this area.
The person appointed will take a leading role in teaching and research in the Inorganic Section of the Department of Chemistry and Applied Chemistry and will be expected to collaborate in the Department's current programme of expansion in Synthetic Chemistry. (Ref CH/283/THES).

LECTURESIPS IN CONTROL AND INSTRUMENTATION

These posts are within the Control and Instrumentation Group of the Department of Electronic and Electrical Engineering. Candidates should preferably possess a higher degree in Electronic Engineering, Electronics or a relevant scientific subject and have a research interest in one or more of the following topics: Control Systems, Analogue or Digital Circuit Design, Imbedded Computer Systems Transducers and Instrumentation or Power Electronics Control. The posts offer considerable facilities for research and development in a broad field of electrical and electronic systems including access to the department VAX 750 and PRIME 550 computers. (Ref E/283/THES).

LECTURESHIP IN ELECTRONIC MATERIALS AND DEVICES

The major interests of the Electronic Materials and Devices Group within the Department of Electronic and Electrical Engineering are concerned with the use of ion and other energetic particle and radiation beams for modifying the electrical and physical properties of materials and for composition and structural analysis of solids. The successful applicant should have research experience in these areas and will be expected to have competence in information technology and/or electronics. (Ref E/284/THES).

LECTURESHIP IN MARKETING

The successful applicant will be expected to teach at both undergraduate and postgraduate levels and to contribute to research in Marketing within the Department of Business and Administration. Candidates should possess appropriate academic qualifications and have strong teaching and research interests in International Marketing. Relevant business experience and knowledge of one or more foreign languages would be an advantage. (Ref BA/398/THES).

Appointments will be made to these posts from 1 August 1985 or as soon as possible thereafter. Salaries: Lectureships on scale £7,500 - £14,925 p.a. Chair within the professorial range and not less than £18,070 p.a. Further particulars are available from the Registrar, University of Salford, Salford M5 4WT. (Tel: 061-736 5843. Ext. 215/7172) to whom completed applications should be returned by 22nd March 1985. Please quote appropriate reference number.

University of Salford

University of Lancaster

LECTURESHIP IN ECONOMICS (ECONOMIC HISTORY)

(Two Posts)
Applications are invited for the following two posts:

1. A permanent post tenable from 1 September 1985. The successful candidate will have a research interest in economic history, but will also be expected to contribute to the teaching of economic history courses and to participate actively in research.

The appointment will be from 1 October 1985 and the salary scale £7,500 - £14,925 p.a. plus superannuation.

Further particulars and application form may be obtained from the Registrar, University of Lancaster, Bailrigg, LA1 4YW, to whom the form should be returned by 22nd March 1985, quoting reference C/300.

2. A temporary post tenable from 1 October 1985 to 30 June 1986. The successful candidate will have a research interest in economic history, but will also be expected to contribute to the teaching of economic history courses and to participate actively in research.

The appointment will be from 1 October 1985 and the salary scale £7,500 - £14,925 p.a. plus superannuation.

Further particulars and application form may be obtained from the Registrar, University of Lancaster, Bailrigg, LA1 4YW, to whom the form should be returned by 22nd March 1985, quoting reference C/300.

University of Birmingham
Management Centre
SERC Work Organisation Research Centre

RESEARCH FELLOW

Applications are invited from well-qualified graduates to work on one or more projects in the SERC Work Organisation Research Centre. The successful applicant will be expected to have a research orientation and an interest in postgraduate work. Preference is given to applicants with a multidisciplinary background (preference for modern library/information technology and computing in one or more of the following fields: Information Science/Computer oriented studies; Indexing, Classification and Cataloguing; Non-book Materials. Applicants should state their area of specialisation.

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La Trobe University Melbourne
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School of Humanities
The position is to be filled as soon as possible.

University of Lancaster

LECTURESHIP IN ECONOMICS (ECONOMIC HISTORY)

(Two Posts)
Applications are invited for the following two posts:

Universities continued



University of Durham

REGISTRAR AND SECRETARY

Following the death of Mr. I.E. Graham, applications from graduates with a high level of administrative expertise, and preferably with University experience, are invited for this vacant senior post.

Salary: Subject to negotiation - within Administrative Grade IV

Further particulars from Miss N. Clennell, Secretary to the Vice-Chancellor, Old Shire Hall, Old Elvet, Durham City, Telephone Durham (0385) 64-466 Extension 604.

Applications including names and addresses of three referees to be received by 20th March, 1985.

THE CITY UNIVERSITY

Lecturer in Computer Science

Applications are invited for a new post of lecturer. The Department of Computer Science is closely associated with the University's Centre for Software Reliability which is making a major contribution to the Alvey Programme.

This is primarily a research post, though some specialised teaching will be required. The person appointed should be capable of making a significant contribution in their field and will be expected to collaborate with other members of the university and industry.

Experience in software engineering, IKS, networking, data bases or graphics is desirable. The appointment will be made to the Department or the Centre, according to the field of expertise, and will be for five years in the first instance.

Salary will be on the scale £8,793-£16,158, including London Allowance.

Application forms and further information may be obtained from the Academic Registrar's office, The City University, University Square, London EC1V 0HE, telephone 01-253 4396 extension 3037. Closing date: 15 March 1985 (020738)

University of Reading

Department of Economics

Applications are invited for an

I.O.I. PROFESSIONAL RESEARCH AND TEACHING FELLOWSHIP IN INTERNATIONAL BUSINESS FINANCE

Initially the appointment will be for one, two or three years, depending on the applicant's previous research record in a relevant area. The fellowship is a proven research record in a relevant area. The fellowship is a proven research record in a relevant area. The fellowship is a proven research record in a relevant area.

Salary to be within Professional range (minimum £8,793 p.a. review from 1 April 1985).

The University of Wollongong Australia

Applications are invited from suitably qualified and experienced persons for:

HEAD, CENTRE FOR MULTICULTURAL STUDIES

The Centre has been established to research and disseminate information about the experience of ethnic minorities in Australia. The Centre is to investigate the social, cultural and economic barriers experienced by ethnic minorities in Australia.

Applicants should have appropriate qualifications and be able to work in an interdisciplinary role. Experience and expertise are required in both 'pure' and 'applied' research. Community involvement, working in a multidisciplinary team, and the ability to develop and maintain a research organisation outside the University are also required.

The appointment as Head of the Centre will be made for an initial period of five years at a salary of £12,000 p.a. (plus £2,500 p.a. of associated professional salary £4,500 p.a.) level.

Following the initial term, the appointee will be eligible for re-appointment. The Centre for a further period or appointed to an appropriate senior position at or above the level of the University. The University will also consider the possibility of the appointee's moving to another University. Also a relocation allowance is payable.

Applicants should provide details of qualifications, employment history, research interests, publications, names and addresses of three referees, and a statement of interest in the position. Applications should be sent to the University of Wollongong, P.O. Box 1144, Wollongong, New South Wales, Australia, by 18 April 1985. Candidates in the field of international business finance should send a copy to the Secretary General, Association of Universities in Australia, 100 Victoria Street, Sydney, New South Wales, Australia.

Monash University

Department of Psychology

TUTORIAL SENIOR TUTOR

Graduates in psychology with postgraduate qualifications in psychology or related areas are invited to apply for a tutorial position. The successful candidate will be expected to assist in the teaching of psychology to first year students. The successful candidate will be expected to assist in the teaching of psychology to first year students.

University of the West Indies Cave Hill Campus, Barbados

(1) SENIOR LECTURER IN LAW

In the Faculty of Law. Applications are welcomed from persons with competence in Commercial Law, Insurance Law and Company Law.

(2) SENIOR LECTURER IN ACCOUNTING

In the Department of Management Studies. Faculty of Social Sciences. Applicants should be competent to teach (i) Financial Accounting, (ii) Management Accounting, (iii) Cost Accounting, (iv) Taxation, (v) Auditing, (vi) Social Psychology.

(3) RESEARCH FELLOW/JUNIOR RESEARCH FELLOW

In the Institute of Social and Economic Research. Applicants should be Social Science Graduates with knowledge of public administration, experience in survey methods, competence in computer use, and experience in editing and producing academic publications.

The successful applicants will be expected to assume duties by September 1985 or as soon as possible thereafter.

Salary scales: Senior Lecturer: BWS\$4,176 p.a. (B) \$5,184 p.a. (A) \$6,192 p.a. (B) \$7,200 p.a. (A) \$8,208 p.a. (B) \$9,216 p.a. (A) \$10,224 p.a. (B) \$11,232 p.a. (A) \$12,240 p.a. (B) \$13,248 p.a. (A) \$14,256 p.a. (B) \$15,264 p.a. (A) \$16,272 p.a. (B) \$17,280 p.a. (A) \$18,288 p.a. (B) \$19,296 p.a. (A) \$20,304 p.a. (B) \$21,312 p.a. (A) \$22,320 p.a. (B) \$23,328 p.a. (A) \$24,336 p.a. (B) \$25,344 p.a. (A) \$26,352 p.a. (B) \$27,360 p.a. (A) \$28,368 p.a. (B) \$29,376 p.a. (A) \$30,384 p.a. (B) \$31,392 p.a. (A) \$32,400 p.a. (B) \$33,408 p.a. (A) \$34,416 p.a. (B) \$35,424 p.a. (A) \$36,432 p.a. (B) \$37,440 p.a. (A) \$38,448 p.a. (B) \$39,456 p.a. (A) \$40,464 p.a. (B) \$41,472 p.a. (A) \$42,480 p.a. (B) \$43,488 p.a. (A) \$44,496 p.a. (B) \$45,504 p.a. (A) \$46,512 p.a. (B) \$47,520 p.a. (A) \$48,528 p.a. (B) \$49,536 p.a. (A) \$50,544 p.a. (B) \$51,552 p.a. (A) \$52,560 p.a. (B) \$53,568 p.a. (A) \$54,576 p.a. (B) \$55,584 p.a. (A) \$56,592 p.a. (B) \$57,600 p.a. (A) \$58,608 p.a. (B) \$59,616 p.a. (A) \$60,624 p.a. (B) \$61,632 p.a. (A) \$62,640 p.a. (B) \$63,648 p.a. (A) \$64,656 p.a. (B) \$65,664 p.a. (A) \$66,672 p.a. (B) \$67,680 p.a. (A) \$68,688 p.a. (B) \$69,696 p.a. (A) \$70,704 p.a. (B) \$71,712 p.a. (A) \$72,720 p.a. (B) \$73,728 p.a. (A) \$74,736 p.a. (B) \$75,744 p.a. (A) \$76,752 p.a. (B) \$77,760 p.a. (A) \$78,768 p.a. (B) \$79,776 p.a. (A) \$80,784 p.a. (B) \$81,792 p.a. (A) \$82,800 p.a. (B) \$83,808 p.a. (A) \$84,816 p.a. (B) \$85,824 p.a. (A) \$86,832 p.a. (B) \$87,840 p.a. (A) \$88,848 p.a. (B) \$89,856 p.a. (A) \$90,864 p.a. (B) \$91,872 p.a. (A) \$92,880 p.a. (B) \$93,888 p.a. (A) \$94,896 p.a. (B) \$95,904 p.a. (A) \$96,912 p.a. (B) \$97,920 p.a. (A) \$98,928 p.a. (B) \$99,936 p.a. (A) \$100,944 p.a. (B) \$101,952 p.a. (A) \$102,960 p.a. (B) \$103,968 p.a. (A) \$104,976 p.a. (B) \$105,984 p.a. (A) \$106,992 p.a. (B) \$107,1000 p.a. (A) \$108,1008 p.a. (B) \$109,1016 p.a. (A) \$110,1024 p.a. (B) \$111,1032 p.a. 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PUBLICATION

Conferences and Seminars

**UNIVERSITY OF LONDON
GOLDSMITHS' COLLEGE**

**QUANTITATIVE METHODOLOGY
IN SOCIOLOGY**

1-day Conference on Friday, 22nd March 2.00pm to 6.00pm

Speakers:-
Dr J. M. Atkinson
(Wolston College, Oxford)

Professor Muriel Cantor
(American University, Washington D.C.)

Also:- James Curran, David Silverman, Gerry Stinson

Fee: £5.50 (Full-time students, unwaged £2.00)

Tickets and further details from: Secretary, Sociology Department (Tel: 692 7171, Ext. 2046). Limited number at door.

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UNIVERSITY OF LONDON GOLDSMITHS' COLLEGE

**THE DREAM OF EDUCATION
FOR ALL - IS IT OVER?**

The Ian Gulland Memorial Lecture given by
STUART HALL

Professor of Sociology, Open University

Tuesday, 12th March 7.00pm
In the Science Lecture Theatre
Goldsmiths' College, Lewisham Way, New Cross,
London SE14 6NW
ADMISSION FREE (020205)

Overseas

**UNIVERSITY OF
TRONDHEIM**

The Faculty of Arts

**LECTURESHIP IN
AFRICAN HISTORY**

At the University of Trondheim, The Faculty of Arts a position, as lecturer of African History is vacant. The position is temporary, but will be permanent from the year 1989 on.

The lecturer will be expected to undertake teaching duties in accordance with the courses of study current at any given time, and who must also carry out examination work without further remuneration.

The appointment is subject to the conditions holding for public office. Annual salary N.Kr. 128,000-176,000 (approx. £12,272-17,015). Applicants will be evaluated both on professional qualifications and on the basis of research and other scholarly work. The application (4 ex.) should give full details of educational background and professional career, and should be accompanied by certified copies of testimonials, and by (3 ex.) copies of relevant published or unpublished research.

Applications containing the names of referees (who should write direct to the University) should be sent to the University of Trondheim, The Faculty of Arts, Trondheim Department, 7055 Drøgtun, Norway, should be postmarked no later than 1st of June 1985. (020789)

SURAN CHANDRAN ISLA-
MAR UNIVERSITY needs a lecturer of Sinhala and Tamil languages for posts on South Indian and Sri Lankan literature from Cultural, Social and Political Studies. Salary and conditions of service as per the University of Ceylon. Applications should be sent to the Registrar, University of Ceylon, Colombo 10, Sri Lanka. (020789)

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Accommodation to Let

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Colleges and Departments of Art

**Central School of Art and Design
Inner London**

Education Authority
Southampton Row,
London WC1B 4AP

**SENIOR LECTURER
GRAPHIC DESIGN**

A Senior Lecturer in Graphic Design is required as soon as possible.

The Department currently offers a B.A. (Hons) Course and jointly with St Martin's School of Art an M.A. Course of four years duration. Research, Design and other part-time courses.

Candidates should have a broad awareness of current graphic design theory and practice and have a particular interest in, and experience of, computer typesetting and the use of other computer aided techniques.

The successful candidate will be expected to exercise significant role in the future development and implementation of the Department's Courses.

Salary scale: £11,175 - £13,588 (band) - £14,041 plus allowance.

Application forms, returnable within 14 days, and further details available from the School.

ILRA is an Equal Opportunity Employer. (020789) H9

**West Surrey College of Art and Design
Farnham**

Surrey County Council
Department of Fine Art

**SUBJECT LEADER
IN PAINTING**

Applications are invited for this post which, due to retirement, will be vacant by April 1986. The College is looking for a person who will be responsible for the Fine Art Department within the S.A. Acting Course in Fine Art and be capable of developing a strong reputation within the Department, in particular with Print-making.

The post will be graded at Principal Lecturer from September 1986.

Salary (Surrey) £11,175 - £13,588 (band) - £14,041 plus allowance.

Application forms and further information from The Registrar, West Surrey College of Art and Design, Farnham, Surrey GU10 2AA. (020789)

Overseas continued

UNIVERSITY OF BOTSWANA

- DEPARTMENT OF LANGUAGES & SOCIAL SCIENCES** invites applications for a post of lecturer. A successful candidate should have a minimum qualification of a Masters degree in English and Education. A Ph.D. degree will be preferred. He will be expected to take language use lectures and tutorials for PGDE and B.Ed (Primary and Secondary) and other related courses as prescribed by the Head of Department. Experience in the use of Teaching Aids in Education will be an advantage.
- DEPARTMENT OF STATISTICS** invites applications for a post of lecturer. Minimum qualifications required will be a good Master's degree in Statistics with some teaching experience (preferably in applied Statistics) at University. Desirable: a Doctorate degree in Statistics, specialising in some applied Statistics area.
- DOCUMENTALIST/RESEARCH FELLOW, NATIONAL INSTITUTE FOR RESEARCH**
Qualifications: At least a B.A. in Social Sciences and M.A. degree in Information Sciences and Documentation or a degree in social sciences plus postgraduate qualification in Librarianship with experience in documentation and information science work. Knowledge of Information systems planning and computerisation of documentation services and development studies will be an advantage.
Duties: Will be overall fellow in charge of documentation services at NIR. Will edit all institute's publications, viz: research notes, conference proceedings, working papers, etc. Will supervise printing and computer units and train documentation staff of various institutions (including SADC countries) in relevant fields. Will be required to carry out both desk and field research work and undertake any extra assignments as may be required by the Institute's Director, e.g. analysing documents using the OECD macrothesaurus, compiling newspaper clippings, bibliographies, directories, etc.
- DEPARTMENT OF PHYSICS** invites applications for the post of Lecturer. Applicants should have at least an M.Sc. in Physics and preferably a Ph.D. in Physics. Experience in Environmental Physics and/or the Physics of Renewable Energy Resources would be an advantage. The Department of Physics offers one major subject as part of a combined major B.Sc. programme. The appointee will be required to design and teach physics courses at all levels in the undergraduate programme, and to undertake research and such other duties as are prescribed by the Head of Department. The appointment is available from August 1, 1986.

SALARY: lecturer P8568 - P16368

Closing date: March 30, 1985

In addition expatriate staff are paid 30% contract addition and 25% gratuity payable at the end of contract.

All applications should be directed to: The Assistant Registrar (Staffing), University of Botswana, Private Bag 0022, Gaborone, Botswana. (020789)

O. M. GABORONE
ASSISTANT REGISTRAR (STAFFING)
February 6th, 1985

UNIVERSITY OF GEORGIA Computer Science Department

Applications are invited for up to three tenure track positions at entry or advanced level. An earned doctorate in computer science or a related discipline is required. Excellence in research and teaching is being sought; all areas of specialization are of interest. The Computer Science Department currently offers an undergraduate major and a professional master's degree. Plans are under way to introduce M.S. and Ph.D. programs. The University's goal is to triple academic staffing in Computer Science over the next five years.

Computing facilities available or else soon to be installed include a Harris 800 System; in the department, several IBM and CDC mainframes in the central computing center, and a Cyber 205 and a Cyber plus in the Advanced Computer Methods Center. Numerous microcomputer laboratories are available to support academic research, supervised lab courses, and individual student project work. In addition, the Advanced Programming Development Division of ETA Systems, Inc. has located on the university campus, in association with the supercomputing center.

All positions are planned to start in September, 1985. Applications must be postmarked April 30. Please send via the names of three referees, and copies of recent publications or preprints to: Robert W. Robinson, Head, Department of Computer Science, 415 Graduate Research Studies Building, University of Georgia, Athens, Georgia 30602. The University of Georgia is an equal employment opportunity/affirmative action institution. (020789)

**PLEASE MENTION
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Posts Overseas China

Lecturers and Senior Lecturers in English as a Foreign Language at Universities and Teacher Training Institutes in Peking and provincial centres

Duties: teams of 2 or 3 lecturers engaged in projects to provide language improvement and methodology classes for Chinese secondary and tertiary level teachers of English, or ESP and study skills instruction for postgraduates. Some senior posts will include teaching of applied linguistics, and materials production.

Qualifications: candidates must be British citizens, holding a first degree in English or other modern language, and a PGCE TEFL or RSA Diploma; an MA in Applied Linguistics is required for some posts. Minimum of 2 years' relevant TEFL experience for Lecturers and minimum of 5 years' experience for Senior Lecturers. Some teacher-training experience desirable.

Salary: local salary Yuan 600-700 per month plus annual sterling subsidy (increase pending) £5,202 for Lecturers, £5,418 for Senior Lecturers (c. Yuan 3,161).

Benefits: free accommodation, air fares, baggage allowance, installation grant, superannuation contribution.

Closing date for applications: 16 March 1985.

Reference: 84 B 96-108TH.

For further details and an application form, please write, quoting the post reference number to: Overseas Education Appointment Department, The British Council, 90-91 Tottenham Court Road, London W1P 0DT. (020789)

The British Council

UNIVERSITY OF CAPE TOWN Dean of the Faculty of Science

The University is seeking a Scientist of distinction to become Dean of the Faculty of Science preferably from the beginning of 1986, but the timing is flexible. The structure of the Dean'ship will be determined in consultation with the successful candidate, but a prime requisite will be that the successful candidate should provide academic leadership for the Faculty.

Appointment will be made on the salary scale R34 070-40 982 per annum with an annual bonus of nearly one month's salary and attractive staff benefits.

Applicants should submit a full curriculum vitae and the names and addresses of three referees not later than 1 May, 1985 to the Chairman, Search Committee (Ref. E/5225), Department of Biochemistry, University of Cape Town, Private Bag, Rondebosch, 7700 South Africa. Alternatively, the Chairman would welcome suggestions on suitable candidates from our colleagues in the academic community. Further information may be obtained from the Registrar or The Secretary, 84 Universities Office, Chichester House, 278 High Holborn, London WC1V 7HE.

The University's policy is not to discriminate on the grounds of sex, race or religion. Further information on this policy is obtainable on request.

UNIVERSITY OF OTTAWA Department of English

Applications are being accepted for three appointments. A tenure-track position at the Associate rank, effective, if possible, July 1, 1985. Special needs are in Nineteenth-Century American and Critical Theory. Secondary consideration will be given to specialists in Modern Poetry and Romantic/Victorian Poetry.

Candidates should have a Ph.D. and possess a strong record of scholarly research.

Two one-year replacement positions in any field are also available from July 1, 1985 through June 30, 1986.

In accordance with Canadian Immigration requirements, the advertisement is directed in the first instance to Canadian citizens and permanent residents of Canada. The University of Ottawa offers equal employment opportunities to qualified male and female applicants.

Deadline for applications is March 31, 1985. Please send c.v. and the names of three referees to:

Prof. Frank M. Tierney
Chairman
Department of English
Faculty of Arts
University of Ottawa
Ottawa, Ontario
K1N 6N5 (020789)

Overseas continued



NATIONAL UNIVERSITY OF SINGAPORE FACULTY OF MEDICINE DEPARTMENT OF PATHOLOGY

Applications are invited for teaching appointments ranging from Lectureships to Associate Professorships in the Department of Pathology. Candidates should possess an approved basic medical degree and a relevant higher academic/professional qualification in Histopathology together with teaching and research experience.

Gross annual emoluments range as follows:

Lecturer	\$30,680 - \$3,670
Senior Lecturer	\$57,580 - 101,930
Associate Professor	\$89,300 - 123,000

(STGE1 - \$82.46 approximately)

The commanding salary will depend on the candidate's qualifications, experience and the level of appointment offered. In addition, appointees with an approved basic medical degree and relevant higher academic/professional qualifications may opt to retain consultation fees up to 80% of their annual gross salary or to receive a fixed annual clinical allowance as follows:

Lecturer	\$36,000/9,000
Senior Lecturer	\$15,000
Associate Professor	\$21,000

Leave and medical benefits are provided. Under the University's Academic Staff Provident Fund Scheme, the staff member and the University are each required to contribute at the present rate of 25% of his salary, the contribution of the staff member and the University being subject to a maximum of \$1,250 per month and \$81,750 per month respectively. The sum standing to the staff member's credit in the Fund is tax-free and may be withdrawn when the staff member leaves Singapore/Malaysia permanently.

Depending on the type of contract offered, other benefits may include: a settling-in allowance of \$81,000 (single) or \$82,000 (married), subsidized housing at nominal rentals ranging from \$8120 to \$8218 p.m., education allowance for up to three children, subject to a maximum of \$810,000 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore.

Application forms and further information on terms and conditions of service may be obtained from:

The Director
Personnel Department
National University of
Singapore
Kent Ridge
Singapore 0511

NUS Overseas Office
c/o Singapore High
Commission in London
5 Chesham Street
London SW1
U.K.
Tel: (01) 236-4562 (020777)

Faculty of Commerce

Senior Lecturer - Co-ordinator Pre-University Bursary Scheme

A newly created post at Senior Lecturer level as Co-ordinator for the Pre-University Scholarship Scheme presents a challenge to a suitably qualified person and represents a major step forward in engineering education in South Africa.

Essentially, the post is a managerial one linked with an ability to provide on the job training for a number of selected Pre-University Scholars. The objective of the scheme is to assist with bridging the gap between schools and university.

Applicants require a minimum of a recognised Bachelors degree in Commerce and must be able to interface with a number of commercial organisations to ensure that the practical training can be carried out effectively.

Salary: Senior Lecturer: R23,916-R30,174 per annum.

Benefits: annual bonus • generous leave • medical aid • pension • remission of fees • housing subsidy, travel, removal and settling-in allowances (if eligible).

The policy of the University is not to discriminate on grounds of sex, race, colour or national origin.

Submit c.v. as soon as possible with full personal and career details and three referees to the Registrar (Academic Staffing), University of the Witwatersrand, 1 Jan Smuts Avenue, Johannesburg 2001. Further details can be obtained from Mr Geoff Henning, South African Universities Office, Chichester House, 278 High Holborn, London WC1V 7HE or Professor R. N. Brits in Johannesburg: telephone 718 3861. (020789)

**UNIVERSITY OF
THE WITWATERSRAND**

Department of International Relations Senior Lecturer/Lecturer

Applicants for this lectureship should have suitable academic and practical experience, in order to be considered for a Senior Lectureship a minimum of 5 years University lecturing at under and post graduate level is required, details relating to previous teaching should be submitted.

The successful candidate will be expected to teach a combination of courses in the following areas:

Indian Ocean Politics, Southern Africa, Geopolitics, International Relations Theory, Atlantic Community and NATO, Warsaw Treaty Organisation and COMECON.

Salary range, according to qualifications and experience: Senior Lecturer R23,916-R30,174 Lecturer R15,000-R21,000

Benefits: annual bonus • generous leave • medical aid • pension • remission of fees • removal, travel, settling-in allowances, housing subsidy (if eligible).

It is the policy of the University not to discriminate on grounds of sex, race, colour or national origin. Submit a comprehensive C.V. with full personal and career details, including the names of three professional referees by 29th March 1985 to the Deputy Registrar (Academic Staffing), University of the Witwatersrand, 1 Jan Smuts Avenue, Johannesburg 2001 or Mr Geoff Henning, South African Universities Office, Chichester House, 278 High Holborn, London WC1V 7HE. (020784)



UNIVERSITY OF THE WITWATERSRAND

Faculty of Engineering Senior Lecturer - Co-ordinator Pre-University Bursary Scheme

A newly created post at Senior Lecturer level as Co-ordinator for the Pre-University Scholarship Scheme presents a challenge to a suitably qualified person and represents a major step forward in engineering education in South Africa.

Essentially, the post is a managerial one linked with an ability to provide on the job training for a number of selected Pre-University Scholars. The objective of the scheme is to assist with bridging the gap between school and university.

Applicants require a minimum of a recognised Bachelors degree in Engineering and must be able to interface with a number of industrial organisations to ensure that the practical training can be carried out effectively.

Salary: Senior Lecturer: R23,916-R30,174 per annum.

Benefits: annual bonus • generous leave • medical aid • pension • remission of fees • housing subsidy • travel, removal and settling-in allowances (if eligible).

The policy of the University is not to discriminate on grounds of sex, race, colour or national origin.

Submit C.V. as soon as possible with full personal and career details and three referees to the Registrar (Academic Staffing), University of the Witwatersrand, 1 Jan Smuts Avenue, Johannesburg 2001. Further details can be obtained from Mr Geoff Henning, South African Universities Office, Chichester House, 278 High Holborn, London WC1V 7HE or Professor R. N. Brits in Johannesburg: telephone 718 3861. (020784)



UNIVERSITY OF THE WITWATERSRAND

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QUEENSLAND INSTITUTE OF TECHNOLOGY - AUSTRALIA

HEAD

DEPARTMENT OF ELECTRONIC SYSTEMS ENGINEERING

QIT is a multi-disciplinary higher education institution with an enrolment of approximately 8,400 students. Brisbane, the city in which the Institute is located, is the State capital of Queensland and has a greater metropolitan population of about one million people. It is a coastal city enjoying a mild climate similar to that of Southern Spain. The Institute has a traditional school/department structure which includes the School of Engineering with five departments. This school offers a wide range of professional qualifications, from Master of Engineering to Associate Diplomas. The Department of Electronic Systems Engineering has been established in the School to take over responsibility for the increasingly important area of electronics from the existing Department of Electrical Engineering. This newly formed department, with an establishment of some 22 academic and support staff, will be responsible for Masters, Bachelor and Associate Diploma programmes and jointly responsible with the School of Computing Studies for a double degree programme in Electronics and Computing.

Applications are invited for the post of Head of this important new department, from persons with an appropriate higher degree (preferably by research) and experience both in tertiary teaching and (preferably) in industry. The appointee will exhibit very high academic leadership and administrative ability. An active interest in the development of electronic systems engineering and a willingness to be involved extensively with the professions and industry must be demonstrated. The appointment will be at Principal Lecturer I level. Salary: \$AU43,929 per year.

Further information is available from the Head of School, Dr. J. Corderoy, tel: (07) 223 2415.

Applications quoting 31/85 with full details including telephone contact and the names and addresses of three referees to reach the Personnel Manager, Q.I.T., George Street, Brisbane, 4000, Australia, by March 29, 1985. (7450)

DARWIN INSTITUTE OF TECHNOLOGY

SCHOOL OF GENERAL STUDIES DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES

Lecturer Grade 1 in Psychology Position No: GS71

SALARY RANGE: Lecturer Grade 1 \$24,211 - \$28,234 p.a. The Department offers a Bachelor of Arts Programme which includes major sequences in Anthropology, English, History, Politics, Psychology and Sociology. All present Psychology officers are in the B.A. in Anthropology, development, social, occupational and cross-cultural psychology and is responsible for the teaching of a Certificate course in Counselling Theory and Practice. It is presently engaged in seeking professional recognition of its units as a major undergraduate sequence.

The Department invites applications from men and women for the position of lecturer to teach units in Counselling and Personality at the degree level and Counselling at the certificate level.

QUALIFICATIONS: Applicants should have a higher degree in Psychology and practical experience in the area of Counselling or clinical Psychology, and should be eligible for membership of the Australian Psychological Society. Teaching experience in Psychology at tertiary level is also desirable. The appointee will be expected to teach in other areas as be decided in consultation with the Head of Department.

For further information on the position please contact Dr D. R. Davidson, Principal Lecturer - Psychology telephone (08) 32421.

CONDITIONS OF SERVICE: In addition to salary a District Allowance of A\$2000 p.a. (with dependent(s) or A\$1700 p.a. (without dependent(s))) is also payable. A copy of the College's Conditions of Service, together with an Information Statement on the above position and the Department will be forwarded on request of applicants.

APPLICATIONS: Applications forms can be obtained from: The Senior Personnel Officer, Darwin Institute of Technology, PO Box 40466, DARWIN NT 5782, Australia, or by telephoning (08) 254444.

CLOSING DATE: 30 April 1985

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